Traffic Safety

NOVEMBER 1961

A NATIONAL SAFETY COUNCIL PUBLICATION

EASTBAY BELTS THEM IN

— Page 8

The Doctor Enters The Picture

— Page 12

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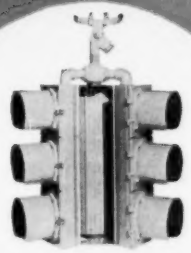

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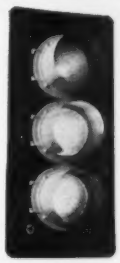

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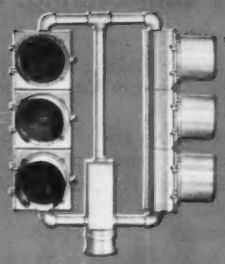

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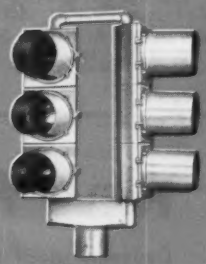

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THE SAFETY LIBRARY

(Monthly supplement to *Guide to Traffic Safety Literature*. Guide is available from NSC.)

by Lois Zearing, Librarian, NSC

Accidents

Auto accidents quadruple at night. *The American City*. September, 1961, p143.

Concepts and classifications of traffic accident causes (part 1). J. Stannard Baker and H. Laurence Ross. *International Road Safety and Traffic Review*. Summer, 1961, p11-18.

Injury-producing private motor vehicle accidents among airmen: Psychological models of accident-generating processes. Joseph E. Barmack and Donald E. Payne. *The Journal of Psychology*. 1961, v.52-p3-24.

Michigan Traffic Accident Facts, 1960. 45pp. Michigan State Police.

Nation's Death Toll Trails 1960 Rate. *Automotive News*. July 31, 1961, p12.

New standards adopted for figuring accident rates. *Transport Topics*. April 17, 1961, p34.

1960 Wisconsin Accident Facts. 1961. 32 pp. Wisconsin Motor Vehicle Department, Madison, Wis.

Off-road smashups raise traffic toll. *Cook County Highways*. July, 1961, p3, 7.

Slaughter after sundown. C. M. Thomas. *Eagle*. August, 1961, p14-15.

Three groups to study survival in watery crashes. *Automotive News*. Aug. 14, 1961, p15.

Toward solving the accident problem. Kenneth I. E. MacLeod. *Public Health Reports*. July, 1961, p606-617. (This paper is an abridged report of the Worcester, Mass., accident survey, July 1, 1957-June 30, 1958.)

Vallejo Freeway; survey shows decline in accident rate. Charles A. Pivetti. *California Highways and Public Works*. July-August, 1961, p25-26.

You, as a California driver. Hal Carrier. *The California Highway Patrolman*. August, 1961, p 17-18, 37-39.

Associations

Traffic Institute to mark silver anniversary. *Traffic Digest and Review*. July, 1961, p13-14.

Traffic Institute to pay tribute to its founders. *Automotive News*. July 31, 1961, p12.

Women's clubs honor ASF. *Automotive News*. Aug. 14, 1961, p15.

Awards and contests

ATA unveils new driver award. *Highway Traffic*. July, 1961, p16.

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Traffic Safety

Volume 59 Number 5 November 1961

A NATIONAL SAFETY COUNCIL PUBLICATION

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TRAFFIC SAFETY is dedicated to the prevention of traffic accidents through the presentation of objective information and responsible opinion to official agencies, public support groups and the motor transportation industry. The views expressed do not necessarily reflect the beliefs or policies of the National Safety Council, but they are presented in the conviction that the pressing social problem of traffic accidents can best be resolved through freedom of expression and open debate.

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BETWEEN STOPS

RECENTLY, the State of Illinois analyzed its 1960 fatal accidents and concluded that "the small cars were neither more nor less hazardous to drive than other cars." The miniatures, which made up 5.8 per cent of registration, were involved in 5.7 per cent of the fatal accidents. Of course, large and small cars did not come out the same in all categories. For instance, the small cars were involved in almost 50 per cent more accidents that "occurred left of the center line." The report surmised that this might be due to the small cars having less power for passing.

With compacts and small imports running about one-third of new car production, we are accumulating an ever-increasing body of statistics on the little fellas.

Let's hope that other states will follow Illinois' lead and take a closer look at the accident experience of cars in terms of size.

DEATH TOLL DROPS 1 PER CENT IN FIRST EIGHT MONTHS OF '61

by H. Gene Miller

MOTOR-VEHICLE deaths in August were practically unchanged from last year's total of 3,470.

For the first eight months of 1961 deaths totalled 23,760, down 1 per cent from the 24,090 total for the same months in 1960.

Travel for the first eight months is indicated to be about 1 per cent ahead of last year. This increase, coupled with the 1 per cent decrease in deaths, produced a mileage death rate of 4.9 (deaths per 100,000,000 vehicle miles). This was the lowest death rate on record for this period, and compares with 5.1 for the same months of 1960.

Disabling injuries during the first eight months of the year are estimated at about 850,000. These are injuries resulting in disability beyond the day of the accident and do not include minor injuries which undoubtedly total hundreds of thousands more.

In contrast with the national rate of 4.9 for eight months, the nation's turnpikes had a rate of 2.2, unchanged from the rate for the same months of the previous year. Turnpike travel was up 5 per cent and deaths were up 4 per cent during these months. For August alone, travel on the turnpikes was up 6 per cent and deaths were down 14 per cent.

Among 47 states reporting August experience, 21 had fewer deaths than last August, five reported no change and 21 had increases.

For eight months 23 states showed decreases, two reported no change and 22 had increases.

H. Gene Miller is director of the National Safety Council's research and statistics department.

Traffic Summary

	1961	1960	Change
August			
Deaths	3,470	3,470	0%
Eight Months			
Deaths	23,760	24,090	—1%
Mileage (billions)	480	474	+1%
Death Rate	4.9	5.1	—4%

Cities experienced a 5 per cent decrease in August, according to reports from 758 cities over 10,000 population. For eight months, these cities showed a 6 per cent decrease.

Cities with fewer deaths in August totalled 132, compared with 121 having more deaths, 505 showed no change (mostly perfect records).

For eight months, 290 cities had decreases while 273 had increases, with 195 showing no change.

In August, 574 of the 758 cities reporting had perfect records. Of these the three largest were: Rochester, N. Y. (318,600), Syracuse, N. Y. (216,000), and St. Petersburg, Fla. (181,300).

For eight months, 221 of the cities still had perfect records. Of these the three largest were: Alexandria, Va. (91,000), New Britain, Conn. (82,200), and Pawtucket, R. I. (81,000).

The three leading cities in each population group at the end of August,

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Leading at the End of August

States

Delaware	—35%	Washington	—10%
Vermont	—26%	Georgia	— 9%
New Hampshire	—24%	Massachusetts	— 8%
Maryland	—21%	Tennessee	— 8%
Mississippi	—20%	Missouri	— 7%
Louisiana	—18%	Kentucky	— 5%
Ohio	—16%	Indiana	— 4%
North Dakota	—16%	South Carolina	— 4%
Utah	—15%	South Dakota	— 4%
Alaska	—14%	Wyoming	— 4%
New Mexico	—13%	North Carolina	— 2%
Florida	—10%		

Cities

Charlotte, N. C.	—58%	Boston, Mass.	—22%
Kansas City, Mo.	—55%	Birmingham, Ala.	—22%
St. Paul, Minn.	—52%	Columbus, Ohio	—20%
Memphis, Tenn.	—42%	Akron, Ohio	—19%
Dayton, Ohio	—36%	Philadelphia, Pa.	—18%
Richmond, Va.	—33%	Dallas, Tex.	—17%
Pittsburgh, Pa.	—32%	Portland, Ore.	—17%
Buffalo, N. Y.	—31%	San Jose, Calif.	—15%
Cleveland, Ohio	—29%	Mobile, Ala.	—14%
San Antonio, Tex.	—29%	Detroit, Mich.	—11%
Phoenix, Ariz.	—28%	Minneapolis, Minn.	—11%
Cincinnati, Ohio	—27%	New York, N. Y.	—10%
Baltimore, Md.	—25%	Los Angeles, Calif.	—10%
San Francisco, Calif.	—24%	New Orleans, La.	— 7%
Atlanta, Ga.	—23%	Oakland, Calif.	— 7%
Albuquerque, N. M.	—23%	St. Louis, Mo.	— 6%

Today's Traffic

Trucker's padre

The Carolina Freight Corp. has a full-time chaplain for its 400 truck drivers and 1,000 other employes. He is the Rev. Jack H. Cooke, 40, a Methodist minister, who performs his duties on an interdenominational basis.

Cars for young drivers

A total of 12,246 cars were used for practice driving instruction during the 1960-61 school year in the nation's high school driver-education courses. Of this total, 6,711 were made available on a free loan basis by new car dealers.

He's still a champ

The *Virginia Traffic Safety News* reports that Howard Godsey of Madison Heights, who is 71 years old, recently won the local Ruritan "Safe Driver of the Year" award. Although he had his left leg amputated in 1909, Godsey, a delivery man, drives 75 miles a day. He has driven 36 years without an arrest or a chargeable accident.

State assist to driver-ed

Maryland now provides state funds for driver education in schools. This summer, learner's permits were increased from $1.00 to $5.00 to produce an annual sum estimated at $600,000. Expenditure of the funds and supervision of the program is vested in the state department of education.

Innocent by-stander

Don Pino, aged 105, was killed recently in a collision between two motor vehicles near Canon City, Colo. He is believed to be the oldest traffic victim in modern history.

Michigan raises limits

New speed limits are now in effect on more than 500 miles of Michigan freeway. The new maximum limits are 70 m.p.h. during the day and 60 at night. They replace maximum speed limits of 65 and 55 m.p.h., and apply solely to freeways—divided highways which can be reached only through the use of interchanges. The new limits do not apply on freeways in major cities such as Detroit.

Crackdown on scoff-laws

New York City drivers are finding that they can't ignore traffic tickets—and get away with it. Several thousand offenders who have ignored two or more summonses for moving or parking violations stand a good chance of having their licenses suspended or revoked under a new "get-tough" policy.

Eastbay Belts Them In

Gigantic educational program puts more than 25,000 seat belts in California cars.

by Royal A. Neilson

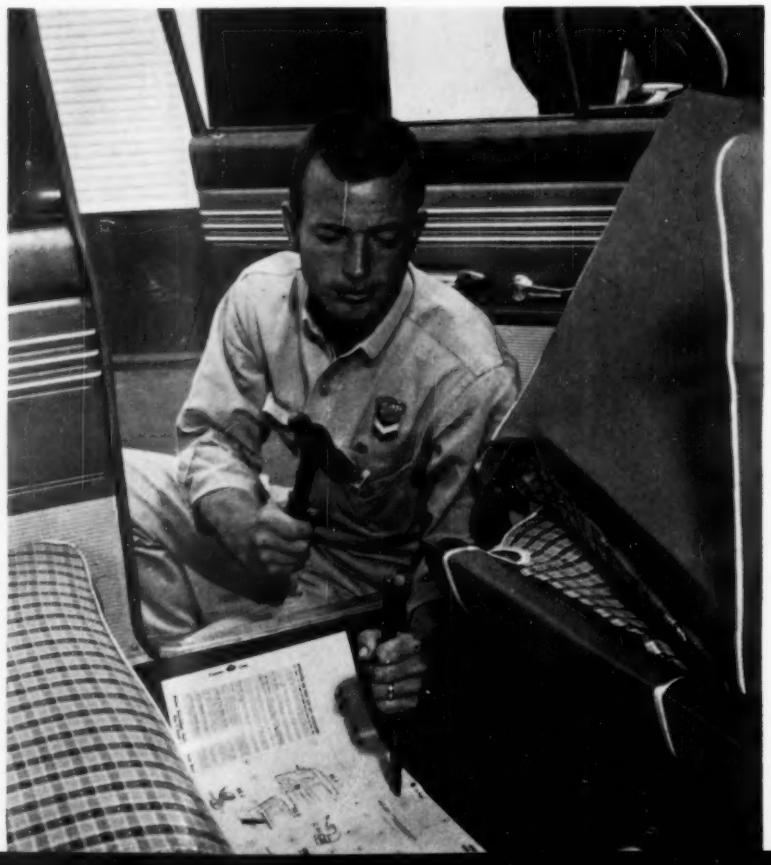
ON AN ordinary working day early this year, the telephone rang insistently on the desk of Werner P. Wilken in the Hazard Control Center, Lawrence Radiation Laboratory in Livermore, Calif. Wilken scooped it up. The voice on the other end was joyful —but earnest.

"Mr. Wilken, I thought you might be interested. You know that seat belt program you conducted for the employes a couple of months ago, well. . . ." *The unseen employe was outlining a recent automobile accident in which he had been the victim . . . Bay Bridge approach . . . heavy traffic . . . his car rolling over and over . . . entirely demolished. . . .* "Believe it or not Mr. Wilken, I was completely unhurt. I was on my way to catch a plane. I made my connection and finished my trip on schedule."

As he listened, Wilken experienced the good feeling of a job well done—of a purpose achieved. The voice continued, "I don't know how to tell you exactly, except to say 'Thank God for your program and that seat belt!' "

The program was one coordinated by the Eastbay Chapter National Safety Council of Oakland. The plan was simplicity itself: Seat belts purchased by a large group of people cost less money than if purchased by one or two at a time.

Dr. John Urlaub, driver trainer supervisor and counsellor at Berkeley High School, had coordinated such a program for the Berkeley School District nearly two years before. At a meeting of the Berkeley-Albany Division of the Eastbay Green Cross in June, 1959, Dr. Urlaub reported on the success of his program. One representative from each of the 22 schools in his district had met to pick a belt and to coordinate the sales program. A local installer had been contracted to install belts in all makes and models of automobiles, at the school yards, at a reduced price of $1.50 per belt. Belts were purchased directly from the factory at savings of about 50 per cent.



Standard Oil Co. of California has been a leader in promoting the use of seat belts. To simplify installation, service stations have been provided with paper templates, keyed to various car models, that show where anchor holes should be placed.

Berkeley School District employes subsequently purchased more than 1,500 belts through the group-purchase plan.

The general method of programming outlined by Dr. Urlaub was a "natural" for expansion by the Green Cross. The Green Cross staff program director made an enthusiastic report to the chapter's manager, Clinton W. Dreyer. At Dreyer's request, Urlaub agreed to serve on a seat-belt advisory committee along with business and industrial leaders. Dreyer assigned the chapter's program director the responsibility of contacting seat belt manufacturers with a view to developing a seat belt program that could be extended to all industrial and civic groups in the chapter area. Two manufacturers, Tulareloft, Inc. and Autocrat Mfg. Co., showed active interest in developing such a program. The companies agreed to supply seat belts on a factory-to-consumer basis for an indefinite promotional period. The Berkeley installers, Kar Kover Kings, agreed to travel anywhere in the San Francisco Bay Area with their portable installation equipment to effect mass installations.

While negotiations were going forward with the manufacturers and installers, the chapter staff undertook research on what had been done in the past on testing, studying and promoting seat belts. Except for several articles in TRAFFIC SAFETY and an article by E. D. Fales, Jr. in *Today's Health* (no longer available as a reprint), little information for popular consumption could be located. It was decided that the chapter should prepare new brochures for mass distribution.

The results of the research conducted by Automobile Crash Injury Research of Cornell and at the Institute of Transportation and Traffic Engineering at UCLA were carefully read and summarized. Art work and production were started on a poster, *Smart Drivers Use Seat Belts,* which proved to be the first poster used in the area. In November, 1959, a one-minute report of the chapter's plans was made at the annual Governor's Safety Congress held in San Francisco. Although it was pointed out that the chapter was not yet ready to conduct programs,

Dr. Bruce Fisher, Dr. Robert MacRobert, Margaret LeFils, R.N., and Barbara Guidotti, R.N., of Eden Township Hospital try out belts installed in program conducted by Alameda-Contra Costa Medical Association.

requests were received for literature as soon as it became available.

Due to this stimulation, work was accelerated. The program director was relieved of other duties and was assigned full time to seat belts. The seat belt brochure, *Project Lifeline,* was written, type was set, layouts finished, art work readied, printing started. Form letters, order forms, recapitulation sheets, proto-type announcements to be used by various groups, thank-you letters, and other such items were developed and printed. Standing displays and car seats (with belts attached) were readied for program use. The two inside pages of *Project Lifeline* were lifted out and reproduced as a single sheet called *Questions and Answers About Seat Belts.*

By February, 1960, we were on the way. Dr. Warren Ketterer and Jack Guest of Contra Costa County Health Department requested our assistance on their seat belt program. The plan called for groups of health department employes to meet at *eight different locations* to hear presentations. With about 160 employes—many of whom already used belts—they were shooting for a goal of 200 belts installed. They closed on the deadline with a total of 199, and subsequently accepted additional orders for a grand total of 380—exceeding their goal.

We were now convinced that programs could be successful with official agencies and school districts, but, obviously, programs could not be confined to such systems. The necessity to get into the great industrial corporations in the Eastbay was clear.

Preliminary program meetings were held in February, 1960, with California Chemical Co.-Ortho Division and California Research Corporation (both subsidiaries of Standard Oil Co. of California) and with the Kaiser Industries. All of us in the chapter connected with seat belt programming felt that our success with these companies would open a door for broad programs with organizations such as Pacific Telephone, Pacific Gas and Electric Co., and the Standard Oil Co. of California, Western Operations, Inc.

The Eastbay has been called a complex of branch plants. Not only would programs in these branches generate support locally, but if successful programs could be completed in the branches, and if reports were forwarded to home offices, then addi-

Royal A. Neilson is member relations director, Eastbay Chapter National Safety Council.

Crew installs belts in employe's car on parking lot of Eastbay Municipal Utility District, Oakland, while EBMUD people look on.

tional programs might spring up across the nation.

In March, 1960, programs were given the green light at Lawrence Radiation Laboratory in Berkeley, Sherwin Williams Corp., Container Corporation of America, and United States Steel Co. *We were on our way.* In the next 18 months, more than 30 groups were to participate in the group-purchase plan.

The Kaiser Companies were located in 19 different locations in Oakland. This necessitated 19 coordinators. The Kaiser Employee Club, with Miss Florence Turner and Doran Emerson acting as general coordinators, provided the liaison between the chapter and the Kaiser people. The plan called for announcements to go to the Kaiser people every Monday during the 30 day program period.

Seat belt displays were planned in several Kaiser locations throughout the city. Installations were to take place in the not-yet-opened Kaiser Center garage. Thousands of *Questions and Answers* were distributed by the hard-working KEC volunteers. The day for accepting orders arrived, and with it, a complicated situation. Kaiser companies were moving from their various locations throughout the city into the fabulous Kaiser Center. But in spite of difficulties, nearly 400 belts were installed by Kaiser people. This program was to lead to a second effort the following year in which more than 500 belts were installed in Kaiser employes' private cars. The big Kaiser Aluminum Co. issued a directive to equip all *fleet* cars across the nation with belts.

The growing talk and activity within the Eastbay communities brought sharp telephone calls from some of the local safety companies distributing seat belts in the area. The chapter had been expecting them. In fact, we had discussed our plans with one or two of them previously, and had been given their blessing. Others, however, not as well informed, panicked at the thought of direct factory sales.

The program director called upon the anxious suppliers. The chapter position was explained in detail and a plea for a free hand (if not active support) was solicited. As concisely as possible we pointed out that the Eastbay Chapter National Safety Council does not endorse or recommend any particular brand of seat belt. Nor does the chapter consummate any sales. The groups with which we work are entirely free to pick the belt and the installer they wish—with or without bids. The group handles all the money and places the order. The belts are received and distributed by volunteers within the group. The chapter acts only in a coordinating and advisory capacity.

Our clinching arguments came from the suppliers themselves. In frank discussions they would divulge that they were selling *some* seat belts to *fleets*, but sales to consumers or retail outlets were practically non-existent. In other words, if our programming were successful, they couldn't sell fewer belts than they were presently doing; and in all probability they would sell a great many more. We made our position clear that when the day came when consumers were accepting seat belts as *needed* accessories, the chapter would withdraw from the present type of program activity and work in more conventional types of promotion.

Every supplier who was approached in this manner gave the chapter his fullest cooperation. Subsequent events have proved that over the past 18 months, seat belt deliveries by these firms have improved considerably. Many suppliers contact industrial plants or official agencies immediately after our employe program closes. Companies and local governments have installed belts in their own fleets, *using local suppliers*, primarily because of the interest shown by their employes in installing belts in private cars. All 15 city fleets and both county fleets within our chapter area are now seat belt equipped.

Negotiations were undertaken with the Radiation Laboratory in Berkeley. C. R. Wintersteen and Carl Bostrum were excited about the possibilities of the program. If they were successful in Berkeley, the larger Livermore Radiation Laboratory would undoubtedly be interested. Also Bostrum planned to make a report on the results of the program to the Atomic Energy Commission meeting in Washington, D. C.

The program — and the ensuing chain reaction—was a rousing success: Berkeley Lab installed 485, Werner Wilken at the Livermore Radiation Laboratory teamed up with Verne McNabney of Sandia Corp. (across the street) and installed 1,997 belts with two programs. General Services Administration and the Atomic Energy Commission in Livermore were prompted to install belts. A total of more than 3,000 seat belts were installed in private passenger cars from these programs. The Atomic Energy Commission in Berkeley has since requested assistance in conducting an employe program.

Mixed in with the larger, more impressive, programs were dozens of smaller ones. The total impact of the

diversified programs had an important effect on the over-all programming in the area. Official agencies installed belts in their fleets due to employe interest, branch plants took the program to a statewide or national basis, the California Medical Association advertised it statewide, Pacific Telephone and Pacific Gas & Electric installed a few hundred belts in fleet vehicles for testing and analysis.

Dr. Donald Stuart MacRobbie, chairman of the Traffic Safety Committee of the Alameda-Contra Costa Medical Association developed a program for all the member physicians and the employes of the 22 Eastbay hospitals. Douglas Hackett, assistant executive secretary of the ACCMA, was assigned the staff work. If Hackett is like most association executives, he welcomed this new task in about the same way a safety council executive takes on the assignment of banning castor beans. However, the pilot program of Dr. MacRobbie and Hackett, et al., was welcomed with such enthusiasm that 450 belts were installed immediately. As this article is being written, MacRobbie's committee is planning a program to be run in the near future during which a well informed coordinator will be located in each of the 22 hospitals to assure maximum penetration. With the entire operation coordinated by the staff of the ACCMA, the promise of success is great.

More than 4,000 mailings were made in behalf of the seat belt program in Northern California. The postage alone was a budget item to be reckoned with. More than 10,000 *Project Lifeline* brochures were produced and distributed free of charge by the chapter. In addition, three reprints of National Safety Council articles totaling 5,000 pieces were reproduced and distributed free. Another 2,000 *Question and Answer* sheets were sold at cost. More than a little of the chapter's budget was spent for the promotion of seat belts.

After more than 18 months preparation, the first big company moved to put the program definitely on a firm foundation. Pacific Telephone-Bay Area placed its order for several thousand belts for installation in its fleet. By the first of the year, approximately 9,000 will be installed. Their continuing employe program is now underway. More than 1,000 belts had been ordered by Pacific Telephone people at the latest count.

Pacific Gas and Electric Co. has tested belts over the past two years, and they are presently surveying fleet drivers to determine needs and preferences. If the decision is to equip the entire fleet, P.G.& E. will require about 3,000 belts across the system. The subsequent employe program is exciting to contemplate.

International Harvester placed an initial order for several thousand belts which they are merchandising under their own trade mark. At last report they were doing a land-office business through their various Northern California outlets.

Seat belt optimism reached a new high with the entry of Standard Oil Co. of California, Western Operations, Inc. into the field. Their large initial order represented nearly twice as many belts as had been sold and reported to the chapter to date. Belts will be installed throughout their entire fleet of passenger cars and light trucks. More than 5,000 Standard Station and Chevron Dealer outlets throughout the West will stock belts, and the station employes are being trained to install them on the spot. An intensive employe seat belt program is being conducted offering a special discount to Standard Oilers to encourage the installation and use of belts in their private automobiles.

In Northern California, seat belts are here to stay. The chapter's records indicate more than 25,000 belts purchased for installation since the program was first conceived 24 months ago. By the time this article is published, this figure will have increased considerably. This figure represents only those installations in which the chapter was directly or indirectly involved. It, obviously, does not include orders placed by Standard Oil Co. of California, Western Operations, Inc. or by other jobbers or distributors. It is well known that traditional sources of supply have continued to be utilized, but we do not know how many sales have gone through these outlets. Nor do we have figures across the nation on sales generated by branch-plant programs in the Eastbay.

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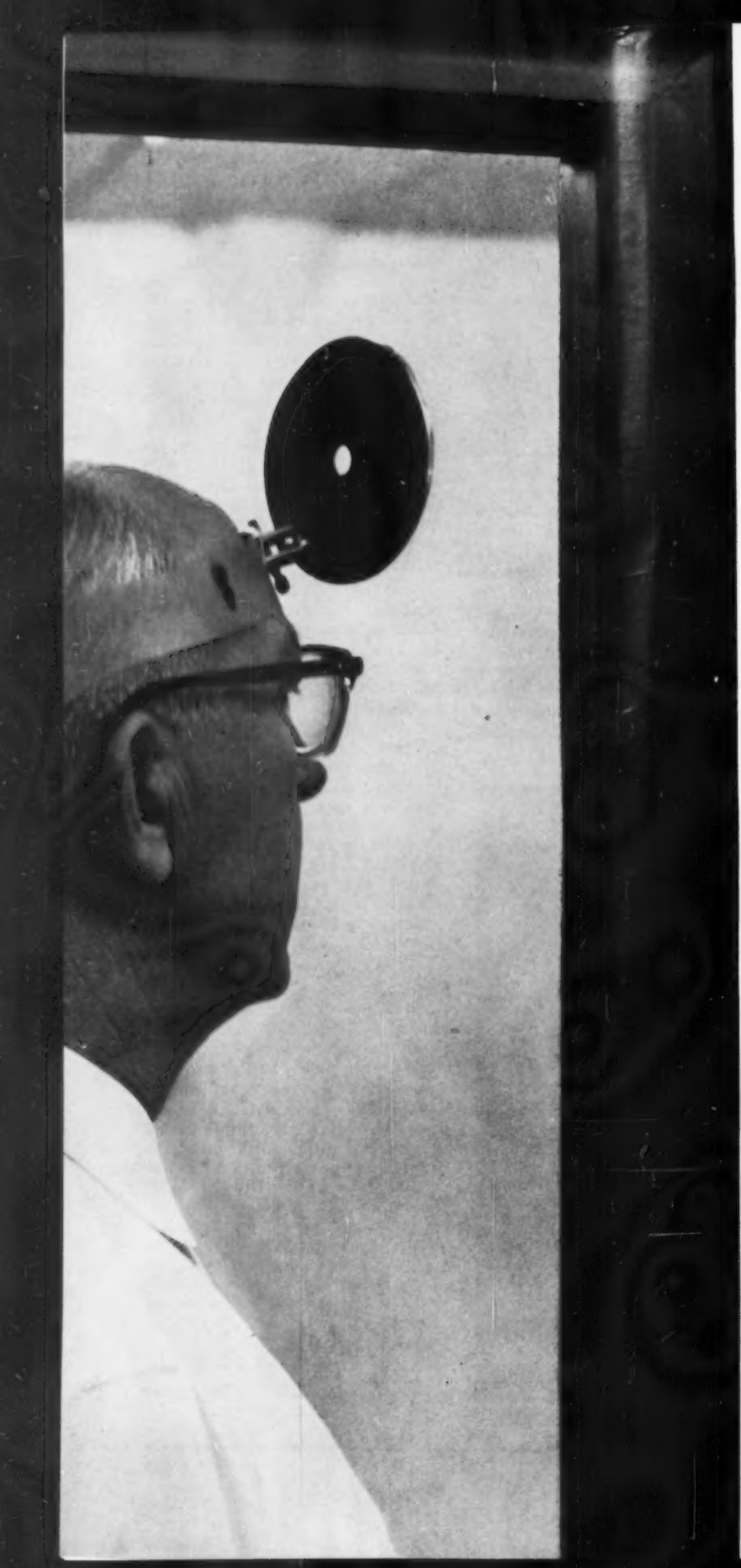
Sue Capri (left) and Lenore Sumners of Kaiser Gypsum Co. "buckle down" at seat belt display in Kaiser Center. Each year the Kaiser employe club, in cooperation with NSC, offers employes an opportunity to buy seat belts at a discount price which includes installation. Sales this year—500 sets—were up 48 per cent over last year.



THE DOCTOR ENTERS THE PICTURE

by Edwin L. Kirby

IN THE history of the traffic safety movement, the officials concerned with traffic accident prevention have been almost entirely interested in just that—prevention. After an accident happens, it is up to the doctors to patch up the injured and sign the death certificates for those who are either D.O.A. or who are too far gone to be salvaged by the surgical skills and modern medications available in our hospital emergency and operating rooms. The great strides the doctors have taken in caring for the injured undoubtedly account for a significant share of the steady decline in the traffic accident death rate in recent years.

However, just as the traffic officials have been preoccupied with prevention, the medical people have been nearly exclusively concerned with the huge human salvage operation necessitated by the more than one million persons who are picked up from our streets and highways each year and hauled to the emergency rooms.

Doctors Needed

Not only can the doctors help out in improving some of the long recognized functions in traffic safety—driver licensing, first-aid training, public education, and research, to name a few—but new problems arise, which also demand their attention. A prime example is pointed out by Donald C. Lhotka, secretary of NSC's Committee on Alcohol and Drugs:

"Many of the drugs used today to do so much good in restoring health and saving lives are also agents of destruction in the high-speed traffic on our highways and streets.

"It is a task for the medical profession and drug producers to warn the users of these drugs of the potentially dangerous effects the drugs can have on abilities to properly handle an automobile in modern traffic. The drugs give no warning, it is up to those who dispense the drugs—the physician or the manufacturer. It is obvious that this kind of voluntary action will not solve the problems in the long run. Official actions will have to be taken. What these will be, I don't know. But certainly, the medical profession will need to lead and advise on what actions are feasible and desirable, both from the point of view of reducing this type of traffic hazard and of protecting the rights of the individual. This area will also require some research to form the basis for intelligent action. The doctors will need to help out."

A major step to develop greater cooperation between traffic safety people and the medical profession was taken in 1956, when the late Dr. Charles G. Johnson, then president of the American Association for the Surgery of Trauma, and Dr. I. S. Radvin, chairman of the board of regents, American College of Surgeons, expressed their views to NSC's executive vice president, G. C. Stewart, concerning a joint accident prevention effort. The surgeons outlined the history and interests of the three organizations and strongly made the point that "the problems of prevention and restoration are interlocking."

As a result of further discussion, a Joint Policy Committee was formed under the chairmanship of Dr. George M. Wheatley, NSC vice president for home safety. This committee developed a national program having these objectives:

1. Education of the public in accident prevention and handling of the injured.
2. Establishment of local committees of the American College of Surgeons and the National Safety Council, together with other interested surgeons, safety engineers, and public officials to formulate safety plans.
3. Registration of unusual cases of injury.
4. Investigations of emergency care of traffic injuries.
5. Model legislation to require adequate training in first aid and transportation of the injured for ambulance attendants, policemen, and firemen.
6. Cooperation in producing and improving training materials and instructional aids dealing with problems in handling the injured.

All of these are long-range objectives. So far, the main program of this committee has been concerned with improving transportation of the injured—certainly an area in which traffic and medical people have equal interests and responsibilities.

Getting the Facts

Facts on available ambulances, equipment, personnel, training, and policies were obtained through the 1958 Traffic Inventory. A report was prepared by Dr. Oscar P. Hampton of the American College of Surgeons. As a result, a joint committee, under the chairmanship of Dr. Hampton, was appointed to draft a model ordinance governing the transportation of sick and injured persons. This model ordinance is still in the drafting stage.

This project also resulted in a statement on transportation of the injured being included in the recently up-dated Action Program of the President's Committee for Traffic Safety, and it is planned to develop an entirely new Action Program section on "Health and Medical Care." Development of this section will require the collection of a large body of facts.

Even before this important action by the President's Committee, steps were already underway to gather information from the states. Traffic safety is still almost entirely a state and local function, and any sound national programs must be based upon what is going on at these levels.

As early as 1958, a meeting was held between representatives of the U. S. Public Health Service, the Association of State and Territorial Health Officers, and the National Safety Council. It was decided to prepare a special questionnaire to be included in the state Traffic Inventory for 1960. This form was to be filled out by the chief public health officers of the various states and was to give us a picture of the extent to which medical services and facilities were being

This article is based on the Summary Report on the special section, Medical Services in Traffic Safety, of the 1960 State Annual Inventory of Traffic Safety Activities, prepared by the Traffic Inventory Division, National Safety Council, with the advice and cooperation of the Association of State and Territorial Health Officers. The report is available from NSC.

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utilized in each state's traffic safety program and in what ways they were being utilized.

To develop a valid and useful questionnaire on a subject so embryonic and scattered as medical activities in traffic accident prevention, especially when almost nothing was known about the state situation, was no easy task.

NSC, which undertook the job, received invaluable help from Dr. Paul V. Joliet of the U. S. Public Health Service, Dr. Carl N. Neupert, chief public health officer of Wisconsin, and several others. The draft of the questionnaire, covering the general areas of administration, driver licensing, alcohol and drugs, education, research, first-aid training, and emergency care and transportation of the injured, was approved by the Executive Committee of the Association of State and Territorial Health Officers at its meeting in Miami Beach in August, 1960. The following month, the Association agreed to act as the advisory group for this special Traffic Inventory section. The questionnaire was printed and sent. Cooperation was excellent. The chief public health officers of 45 states completed the form.

Information reported was collected and organized into a 30-page detailed report, with the assistance and approval of Dr. M. I. Shanholtz of Virginia, president of the Association of State and Territorial Health Officers, and Dr. Andrew C. Offutt of Indiana, association secretary. The report has been given wide distribution. Following is a summary of the findings, plus the conclusions and recommendations.

Summary

1. In 17 states the state chief health official is on the official state coordinating committee for traffic safety. Most of these officials report attending the meetings of this committee.

2. The driver-licensing authority consults the chief health official on standards in 12 states. Only three state health departments have established medical standards for driver licensing. In 20 states other medical resources are utilized by the driver-licensing authority. In most cases this is the state medical society or private physicians.

3. In 15 states the chief health officer participates in developing or administering special requirements applying to school bus drivers. Other medical facilities provide this service in eight states.

4. The chief health official has a follow-up program in three states on persons discharged from mental hospitals to determine their fitness to drive. Other facilities are used in 13 states, usually the medical officer of the institution involved.

5. Only a few states have complete records of any of the conditions likely to impair fitness to drive. Many more have some partial records. This information is available to the driver-licensing authority in 15 states, while in 16 states it is not. One state health department reported that it was never asked for this information.

6. In 13 states the chief health official has a policy on the advisability of licensing epileptics. In most cases this involves certification by private physicians.

7. The chief health official exercises supervision over policies and procedures used in chemical tests for intoxication in 10 states, in seven states he certifies equipment used, in six states he has a training program for personnel administering such tests, and in 13 states his department cooperates in testing specimens. In 14 states medical advice and supervision is provided by other sources.

8. In only five states does the chief health official advise the enforcement, legislative, and judicial authorities on criteria related to use of medications that might impair driving ability. Advice is provided by other medical sources in eight states.

9. Advice on the driver licensing of persons addicted to narcotic drugs or alcohol is provided by the chief health official in five states. Other medical sources are utilized in 10 states.

10. In 29 states the chief public health official's department participates in public traffic safety education through public health channels. Traffic safety material is included in the news releases and publications of the health departments in 41 states.

11. The health departments in 12 states participate in some way in the high school driver-education programs.

12. In six states the chief health official conducted traffic safety research projects in 1960. Statistical analyses of motor vehicle deaths were conducted by the health department in 20 states. In 16 states the accident-records unit utilized the special knowledge of statistical and research techniques of the health department.

13. The health departments in four states provided or assisted in first aid training for enforcement personnel in 1960. Other facilities were used in 40 states, most frequently the American Red Cross. The department engaged in other activity to improve emergency medical care in eight states.

14. Five states have legislation governing training of ambulance personnel and equipment of ambulances. In three of these states it is the opinion of the chief health official that this legislation is inadequate.

Conclusions

1. The chief public health official, who has an important contribution to make to traffic safety functions, is not on the official state coordinating committee for traffic safety in most states.

2. In general, little use is being made of organized medical facilities and knowledge, official and non-official, to improve traffic safety functions at the state level.

3. There is much evidence that the chief state public health officials are willing to furnish medical information and to cooperate in traffic safety activities.

Recommendations:

1. That the chief public health official, representatives of organized medicine, and officials with traffic responsibilities meet together in each state to determine how medical facilities and knowledge can best be utilized in improving such functions as driver licensing, utilization of accident records data, education, emergency care and transportation of the injured, first-aid training, chemical testing for intoxication, research, and enforcement. Information in this report should be fully utilized in such determinations.

2. That the chief public health official be appointed a member of the

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NEWS FROM CAPITOL HILL

THE customary legislative speed-up took place in the prospect of Congressional adjournment.

Traffic Safety

President Kennedy announced the appointment of nine members of the President's Committee for Traffic Safety. Two of the nine, including its chairman, were reappointments. For the Labor Day weekend, the President urged that Americans drive "with patience and a clear head." He denounced highway deaths and injuries as a national hardship and as needless economic waste.

The Congress is actively considering the creation of a new executive department to deal with metropolitan problems. The Senate Committee on Government Operations approved S. 1633, to create a Department of Urban Affairs and Housing, which would provide technical aid and information to state and local governments in the solution of urban problems. The parallel House Committee approved H.R. 8429, which is substantially similar. The House Committee report states: "Further, the complex of problems plaguing our urban and metropolitan areas spill across state lines and frequently are insoluble by the states or even groups of states. Many of these are truly national problems and leadership must be taken by the federal government if a proper solution is to be found." In the testimony by mayors urging enactment of the bill, reference was made, among other things, to traffic congestion, highway location and smog control.

The House Committee on Government Operations published a report prepared by the Advisory Commission on Intergovernmental Relations, which was set up under federal law. The report, "Governmental Structure, Organization and Planning in Metropolitan Areas," urges federal financial assistance to metropolitan area planning agencies, provided such agencies meet federal standards which, according to the advisory commission, "might include," land-use plans covering "thoroughfare plans, mass transportation plans. . ."

Through the Secretary of Health, Education and Welfare, the administration issued an ultimatum to the automobile industry. The cabinet officer demanded that the industry provide blowby control devices, to deal with auto exhaust, as standard equipment beginning with the 1964 models or face legislation mandating such equipment. The Under Secretary of Health told the American Municipal Congress that "we are very much in earnest about controlling air pollution," and that his department was considering a bill to strengthen federal efforts toward that end. "Approximately 90 per cent of our urban population," he said, "lives in localities having air pollution problems." He also announced that the U. S. Public Health Service "is completely tooled up to begin an extensive series of experiments on the health effects of automobile exhausts."

In addressing the first World Traffic Engineering Conference, the Secretary of Commerce laid heavy stress on safety. He (1) told of studies of the feasibility of electronic control of highway traffic in which "accidents could be virtually eliminated" (2) stressed the safety advantages of billboard control along highways (3) urged greater uniformity in highway signs (and promised to make "a strong effort to obtain more uniformity in traffic signs, signals and markings throughout the country") and (4) emphasized the need for greater research.

The Federal Highway Administrator disclosed that "over 26 per cent of the Interstate [highway] System is now open to traffic," with 10,800 of the 41,000 miles being open. Another 4,800 miles are also under construction.

Sept. 1, 1961, was the effective date of an order of the Federal Communications Commission assigning three radio frequencies to be exclusively available for omnidirectional usage to control traffic signals. The maximum allowable power for this purpose was raised from 30 to 100 watts.

In recommending a federal subsidy for railroad passenger service, the Interstate Commerce Commission said in part: "A nation that is serious about propelling a man to the moon should be able to solve the mundane problem of moving its citizens dependably and comfortably some 50 miles or less from home to work without multiplying ribbons of concrete and asphalt that would strangle the central cities they are supposed to serve."

Motor Transport

Both houses of Congress passed, and sent to the President, H.R. 8033, a bill to reorganize the Interstate Commerce Commission, permitting ICC to delegate authority to employe boards to review cases concerning safety, among other matters. Appeal from such employe boards lies to the commission itself. The bill was opposed by the American Trucking Associations, but was approved by the Association of American Railroads and by the ICC itself.

The ICC issued proposed regulations covering motor carrier transportation of certain explosives or radioactive poisons. These regulations would require that written instructions be provided to drivers, which they shall keep in their possession and observe, covering (1) the route to be followed, which shall avoid congested thoroughfares, places where crowds are assembled, street car tracks, tunnels, viaducts, and dangerous crossings; (2) designated stopping points including rest and meals; (3) procedures to assure that vehicles are attended while drivers are at meals or resting, and (4) procedures for delivery without leaving vehicle unattended.

This report is an information service. Publication does not imply National Safety Council approval of or opposition to any legislation mentioned.

TRAPPED IN A SINKING AUTO!

Test in Michigan explores methods of escape

PASSENGER cars, undamaged by impact in plunges from roads and bridges into deep water, will float four to eight minutes before submerging. The best time and method for occupants to escape or be rescued is through a window while the vehicle is afloat.

These are two of the most important preliminary findings following eight days of testing to determine the best methods for escape or rescue in such accidents in the national car submersion project conducted in a water-filled pit at Williamston, Mich., September 6-13.

The program was a cooperative undertaking of the American Red Cross, Indiana University, and the Michigan State Police and Michigan State Highway Departments, the first extensive test of its type in this country. Motivating the study was the fact that about 400 persons die annually in this type of accident in the United States.

Battery of Experts

Underwater examinations of the submerged vehicles were made by Michigan State Police skin divers under the supervision of Lt. Jack Foster and Cpl. William Carter of East Lansing headquarters. Richard Brown, national director of Red Cross water safety services, was project co-ordinator. Bernard Kuhn, Indiana University graduate student and technical adviser of the project, will use the tests and the findings for his doctoral thesis at the university.

Michigan Highway Department personnel used its equipment to prepare the site and assist in the launching and recovery of the vehicles. Car transport rigs as launching ramps were provided by Howard Sober, Inc., Lansing. The Lansing Auto Salvage Co. contributed six older vehicles and General Motors and the Ford Motor Co. each provided a 1961 model car for the project.

Fifty-three submersions were made, using six older model and two 1961 vehicles, all front-mounted engine passenger cars. The drops were made from heights of 2 to 20 feet and at speeds from 5 to 16 miles an hour into 12 feet of water. No passengers were used. Most of the tests involved plunging the vehicles, wheels down, from ramps into the water. Several free-fall tests, by means of crane hoist and cable, were made with cars dropped into the water on their sides or tops.

Preliminary findings included:

Cars with windows intact and closed will float longer than those with glass area open or broken, providing greater opportunity for escape or rescue. The tighter the body construction, the longer the vehicle will float.

As the vehicle submerges, the passenger compartment fills with water, compressing trapped air to the rear and into the trunk area. If the car levels at the bottom, the air pocket repositions itself in the roof of the passenger compartment above the door and window openings. This pocket of air will vary in size according to the submerged position of the car, its roof design, and whether the glass area has remained intact. The opening of doors or windows on the submerged vehicle does not affect the size of this air pocket.

Passenger compartments of the test vehicles, with windows opened or closed, were water-filled about the same time the cars disappeared below the surface. There was one exception in the air pocket movement pattern. This was a compact car in which the air was not forced into the trunk but remained in the rear of the passenger compartment while submerging.

If the occupant is unable to leave while the car is on the surface, he should get to the rear of the passenger compartment in order to breathe the trapped air while planning his escape through the nearest window, by opening a door, or by breaking the back window. Water inflow pressure would make escape or rescue through an open window difficult while the vehicle is submerging.

Rescue of persons from a still buoyant car should be effected through a window, with the rear window considered the best place. Rear window glass is usually of the tempered type and this can be easily shattered by a hard object, such as a hammer or center punch.

The rescue of occupants in a station wagon with windows closed should, if possible, be through the tail gate. Persons trapped in such vehicles would probably have a better chance of escape if the tail gate could be manually opened from the inside.

Escape After Submersion

Doors cannot be opened on submerging cars until the water pressure equalizes inside and out. If not damaged on impact, doors can be opened after submersion. Windows, if undamaged, can be rolled down at any time.

Vehicles with front-mounted engines sink nose first and in water 15 feet or deeper may turn completely over and settle on their tops. In the test depth of 12 feet, vehicles settled to the bottom in 10 seconds or less after passing beneath the surface.

Cars with windows closed which were dropped on their sides or tops righted themselves before submerging to the bottom, wheels down. Those with windows open upon entering the water with wheels up will probably remain in that position in submerging. No appreciable amount of trapped air was found in the passenger compartments of vehicles which submerged wheels up.

The use of safety belts would increase the chances of occupants escaping injury in the initial impact of the plunge into the water.

At Williamston, Mich., testing site, cars were rolled down ramps or dropped by a crane hoist into 12 feet of water from heights 2 to 20 feet.

Hitting the water at speeds from 5 to 16 m.p.h., autos with front-mounted engines sank nose first with wheels down if windows were closed at impact.

As the car sank, air was forced to the rear compartment and into the trunk. If the auto leveled at bottom, air repositioned itself near the roof.

Insurance Institute Staff Changes

James R. Berry has been named a traffic consultant for the Insurance Institute for Highway Safety.

He was formerly a supervisor of technical services with the safety education division of the Iowa Department of Public Safety.

The IIHS has also announced the following staff promotions and assignments.

Nils A. Lofgren, director of program planning, will be given increased responsibilities. He will be generally responsible for IIHS activities related to statewide citizen traffic safety support groups, in addition to the IIHS "direct assistance" programs for selected states.

Adrian H. Koert will be director of the assistance programs in Arizona, Florida, New York, and Wisconsin.

William J. Toth will be assistant treasurer. He will supervise the IIHS Annual National High School Driver Education Award Program and assist Secretary-Treasurer Richard O. Bennett in office management and in the evaluation of IIHS financial support to national organizations working in traffic safety. Toth previously worked on the direct assistance programs.

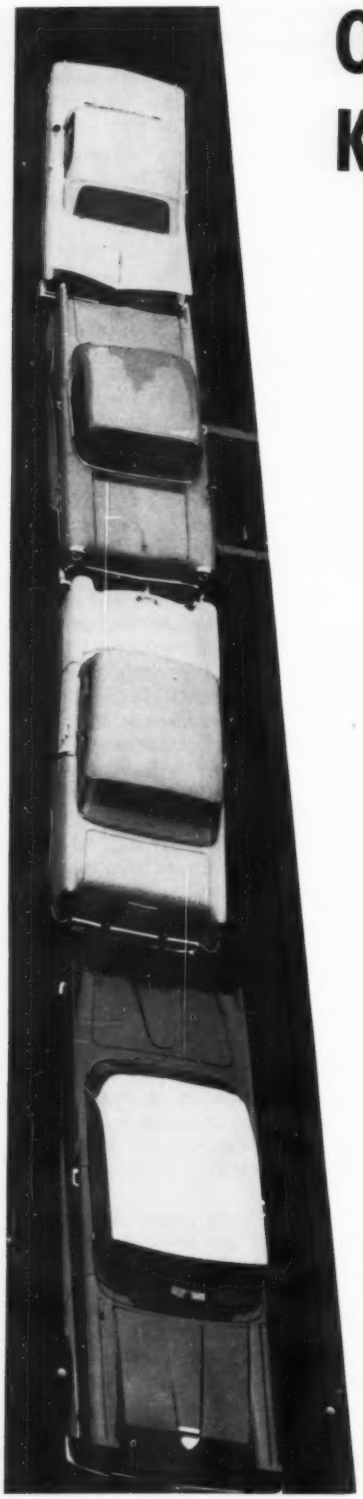
Emerson H. Westwick, who has been serving in the Arizona direct assistance program and also as executive secretary of the Association of State and Provincial Safety Coordinators, will devote full time to the latter duties.

Armco's for Seat Belts

Armco Steel Corp. is equipping all of its company owned or leased motor vehicles with safety seat belts, J. S. Chapman, manager of safety, has announced.

"We are well aware that the installation of seat belts in Armco vehicles is just the first step," Chapman said. "We know that an unused seat belt is of no value so we will stress the need to wear the belts at all times while traveling on the streets and highways."

Chapman added that Armco men and women will be encouraged to have seat belts installed in their own personal automobiles.



OFF-STREET PARKING . . . KEY TO URBAN MOBILITY

by Jerry P. Gilbert

THE fact that curb parking restrictions increase street capacity is seldom questioned and is general knowledge among motorists and the public. HOW MUCH street capacity is increased by parking removal under various conditions is not realized or appreciated, either by the general public or by many officials directly or indirectly involved in the highway transportation picture.

My experience in three medium sized communities in two states has led me to the conclusion that about the most frequent cause of complaints, and the most difficult problem to solve, is the removal, restriction, and control of curb parking. And the smaller the community, the more unacceptable are these measures as a means to increase capacity.

Furthermore, it is in the smaller communities that alternate means of increasing capacity, such as street widening and expressways, are less available because of costs. Cities the size of Springfield, Ill. appear to be too small to support expressways, but too big not to have them. In this respect, it seems that the smaller communities are going to be faced with traffic problems which are more insurmountable than those of the larger communities. Yet more than half the population of the United States is concentrated in cities of 100,000 population or less. This situation, coupled with the fact that it is estimated that the number of vehicle miles of travel will increase roughly 75 per cent in the next 20 years, poses problems of inadequate capacity which must be met with widespread curtailment of parking in conjunction with other methods. How these increases in motor vehicle travel and registration are going to be provided for is the subject of much discussion and concern throughout the country, and is one of the major challenges of our time.

Throughout these discussions, there appears to me a rather obvious omission of any positive statement as to what IS going to happen to the on-street parking in the future as a means to increase street capacity. I am assuming that the rea on for this omission is that the answer is obvious—that in the future, there simply won't be any on-street parking on the major streets because any approach to the problem of increasing capacity while retaining on-street parking would not be economically feasible.

Doubles Street Capacity

To see why, let us briefly review some of the results determined in the *Highway Capacity Manual* published by the Bureau of Public Roads.

Different drivers react to roadside conditions in different ways, and the following statements taken out of context from the manual are generalizations. Many other factors must be taken into account before exact capacity figures can be obtained for a particular street or facility, but the relative effect of parking on capacity can be determined from the following excerpts, which permit a better perspective of the problem.

"Capacity volumes on downtown streets where parking is permitted are about 55 per cent, on the average, of those observed where parking is prohibited."

Stated another way, the removal of parking almost doubles the capacity of the streets to carry traffic.

"A 40-foot downtown street with-

Jerry P. Gilbert is traffic engineer for the city of Springfield, Ill.

out parking is equivalent to a 68-foot street with parking"— in its traffic-carrying capacities.

This is a reduction of 28 feet or, 14 feet in the effective width of the 68-foot street for EACH line of parked vehicles. On one-way streets, parking reduces capacity even more. A 34-foot one-way street without parking can accommodate the same volume as a 70-foot street with parking permitted.

A one-way street with parking on one side will accommodate approximately the same total traffic as a two-way street the same width with no parking. In intermediate areas, the effect of parking is much the same.

In general then, with the above in mind, it would appear that we are faced with the choice of removing parking on our major streets or doubling their widths to achieve the same results upon capacity.

The choice, in my opinion, is obvious—remove the parking. The only question to be answered then is WHEN. In answer to this question, most traffic engineers are guided by the basic policy as stated in the Eno Foundation book entitled *Parking*— that "streets are primarily intended for travel, and that whatever part of the street is needed for free movement of traffic must not be used for parking."

"However," the statement continues, "no reasonable use of streets for parking should be prohibited or restricted until traffic demands become pressing, and parking should be permitted and regulated wherever and for as long periods as equitable.

"In the application of this theoretical approach, it should be remembered that the first purpose of streets is to move traffic, not hinder it."

These are time-worn phrases with which we are all familiar, but unqualified acceptance of them is still lacking.

In practical application of the policy, the procedure is usually the restriction of parking only after most other methods of traffic control to increase capacity have been exhausted. Signals are installed, streets painted, turns facilitated or restricted, streets are made one-way—and then parking is eliminated, before any physical changes are made by widening the streets.

One other approach deserves our attention. That is the simultaneous approach to both the parking and traffic problem taken when communities embark upon a program of widening streets and then either retaining parking on them, or, in some cases, reinstating parking which has been previously removed. The procedure is to widen the street to the extent that the full street width may accommodate anticipated 1970 or 1980 volumes, but present volumes permit the reinstatement or retention of curb parking. None of the above mentioned theories or policies have been contradicted by such an approach, provided proper widths have been chosen to realistically take into account the restrictions on capacity imposed by the parked cars, which is seldom the case.

Traffic Rushes In

As mentioned earlier, street widths must be established 50 to 100 per cent wider to fully compensate for parking on them — not just the 7 feet the parked car actually occupies. In this respect, I would like to emphasize that widening a 40-foot street without parking to a 60-foot street with parking has not accomplished a single thing capacity-wise. Even if the new width is established to fully compensate for the parked cars, the slack is frequently taken up by traffic induced onto the new facility from other routes, and the new street is again operating at, or very near, its capacity in a very short period of time. Even at very best, the approach simply prolongs the inevitable restrictions at some future date.

In my own mind, I question whether parking restrictions will be any easier or more acceptable in one year, or five or ten years in the future, than they are now.

In almost every instance in which parking restrictions are presently necessary, but difficult to impose because of the absence of developed off-street space, space is presently available for improvement but is being reduced by new construction every day, making it progressively more difficult to obtain and develop.

In this regard, I cannot help speculating on what our present conditions would have been, and what the advantages would have been, had parking restrictions been imposed on major streets 10 or 20 years ago. The provisions of off-street space would have been easier since competition for such space was not as great as it is today. Traffic conditions and accident experience would have been favorably affected much more than is commonly realized. Would not the total cost of providing both terminal and traffic facilities have been effectively reduced?

Of course, even the best informed, have consistently underestimated the growth in past vehicle registrations, so such a Utopia as all major streets without parking is a little far fetched. However, I simply question whether or not we may be making the same mistake now as we have in the past by insisting on major streets carrying their maximum capacities before parking restrictions are imposed. I wonder if we are doing even the minority groups opposed to parking restrictions any particular favor by delaying action which we know is needed now, or will be required in the near future.

Most medium and small sized communities now have controls established for new construction which require the provision of off-street space under a wide variety of formulas. But those responsible for the administration of these ordinances have probably had occasion to question the adequacy of space requirements for parking—one way or another. At least, when there is no on-street space available, the owner will make a more realistic appraisal of parking requirements than he would if curb space were available.

Thus far, we have confined our discussion to parking as it relates to street capacity with no mention of other disadvantages of on-street parking.

I would like to list a number of other disadvantages of curb-side parking as they occur to me, their order being unrelated to their importance.

Curb parking contributes substantially to the total number of accidents occurring. (In Springfield last year, 20 per cent of all accidents involved parked cars directly.)

The parked car contributes heavily to the number of intersection accidents by restricting visibility.

The parked car is a vital factor in the occurrence of pedestrian accidents, particularly those involving children, by restricting visibility of both the motorist and the pedestrian.

Accidents are caused by persons entering and leaving parked cars.

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HOW NEW YORK CITY HANDLES WINTER STORMS

by Frank J. Lucia

AT 1:45 p.m. on December 11 last year, a Sunday, snow began falling over New York City which lasted more than 30 consecutive hours and gave us our worst snow storm since 1872.

Digging ourselves out of it was one horrendous job. We spent more than 7 million dollars getting rid of this and following snows.

The entire northeast was hard hit last year, and it occurred to General Frederick S. Clarke, Engineering Commissioner of Washington, D. C., and myself, that if municipal officials from this area could get together at winter's end, while the experiences and problems we had encountered were still fresh in our minds, that we might all benefit from pooling our ideas as to the best techniques for handling such emergencies.

So on March 23-24 we held a Round Table Conference on Urban Snow Removal here in New York. Officials came from Philadelphia, Baltimore, Boston, Pittsburgh, Washington, D. C., and Buffalo. The meeting was beneficial and we plan to continue such liaison.

We found that our problems are pretty much the same. Most of us agreed that we need newer and better equipment for snow removal operations. We are working toward that goal here in New York. We found that there is a tremendous need to educate the driving public to its responsibilities when snows come. One of our big problems is obtaining compliance with parking bans which are necessary to permit us to get plowing and removal operations done. It is our opinion that heavier penalties for parking violations which hamper removal operations is the most effective way to get motorist compliance.

We also agreed that officials should ask the public to keep automobiles off

Frank J. Lucia is commissioner of the New York City Department of Sanitation.

the streets during and immediately after storms unless the trip is absolutely essential. The combined experience of the cities represented reveals that many motorists just don't know how to drive in snow and ice, and that there is a genuine need to educate them in the techniques of this kind of driving, and to impress upon them the need for snow tires and chains to prevent stalling and consequent holdup of removal operations.

The important and complex job of the police department during such storms was also discussed, as were all facets of responsibilities when blizzards strike.

Because so many cities face these problems each winter, the following account of what we do here in New York City to get ready to handle the millions of cubic yards of snow which must be hauled off and dumped, may be of interest to officials.

Mammoth Job

The magnitude of our snow removal job in New York City may be gauged by these statistics. Our resident population is slightly under eight million. There are some one and one-half million vehicles registered in New York City. The suburban communities which circle New York City have nearly eight million people and about three million vehicles. Many suburbanites commute to work in the city and, along with our visitors, make up the two and one-half to three million transients who enter and leave the city daily. This resident and transient population travels upon our 6,000 miles of streets.

In addition to handling snow removal, New York City's department of sanitation is concerned with street cleaning, refuse collection and refuse disposal. We have 14,000 employes organized in a line and staff military type of organization built around its operating responsibilities. About ¾ of the total personnel is assigned to the bureau of cleaning and collection. For efficient operation and effective administrative control, the city has been divided into 234 sanitation sections, each headed by a foreman. These are combined into 57 sanitation districts, each headed by a district superintendent, and further combined into eight borough commands, each under the control of a borough superintendent, and thence up the line through the chief of staff, director of operations, to the commissioner. Also reporting to the director of operations are the bureau of motor equipment which is concerned with equipment maintenance, the bureau of plant maintenance which is concerned with maintenance of our structures, the bureau of waste disposal and several smaller units. The commissioner's staff units comprise the engineering office, public relations, labor relations, legal and medical personnel, who supply the other necessary technical and professional services required by operations.

Our motor fleet on January 31, 1961 consisted of nearly 4,000 pieces of motorized equipment. Of this total, there are 227 salt and sand spreaders, 1,563 collection trucks and 129 flushers which can be equipped with plows for snow plowing, 399 crosswalk plows which are small wheeled tractors equipped with plow blades for clearing crosswalks, bus stops, hydrant areas, etc., 102 snow blowers, 91 front end loaders, 321 trucks which can haul snow and 94 tow trucks.

From the foregoing outline of our city and department, it can be readily appreciated that pre-season snow operations are a huge task of the greatest importance. Our planning and preparation never cease. Even during the height of a snowstorm, our officials make notes for future activities to improve operations in subsequent storms. Formal planning and pre-season operations start at the end of each winter and continue until the following winter.

Manual Guides Operations

Virtually all of the detailed departmental procedures for snow removal are recorded in our Snow Removal Manual. Although these procedures are modified from year to year, the annual changes are usually slight. These manuals are distributed down to the district level so that each employe associated with snow removal operations knows specifically what is required of him when a storm strikes. The manuals are turned in during the first week of May to prevent the circulation of confusing obsolete information. Obsolete sections are then revised and, during the first week of November, the revised manual is distributed.

Then, to insure that these contents are understood, particularly the critical points and those items which have changed, the chief of staff discusses its contents with the borough superintendents and other high officials of our bureau of cleaning and collection. In turn, the borough superintendents discuss the manual with their district superintendents and other high borough officials. District superintendents similarly discuss the contents with their garage and district supervisors, and so on down the chain of command until all of our personnel receive their instructions.

For each district, street-by-street schedules are in existence for plowing, spreading, and hauling. By June 1 of each year these routes are reviewed, and revised when necessary. Action is thus taken on new expressways and any changed conditions which require alteration of the routes.

Cover the Waterfront

We dump snow at the waterfront and also through manholes into the sewerage system. Prior to June 1 of each year, district superintendents submit a list of all waterfront locations within their respective districts that lend themselves to snow dumping. Formal request is then made to the city's department of marine and aviation for these snow dumping locations. After approval is obtained, the district superintendents are informed and they designate the snow-hauling gang which will utilize them and include these locations in the snow-removal schedules.

A similar procedure is followed with sewers, but in this case we deal with the borough presidents' offices since they have jurisdiction over the sewers.

Motorized equipment which is used only for snow removal is inspected, serviced, repaired, and placed in storage during the early spring. During the late spring and throughout the summer this equipment is again inspected, started and run every two weeks to prevent motors from seizing. In the fall, the equipment is again inspected, taken out of storage, tested, and painted so as to be in the best condition prior to the snow season.

At the end of the winter, section and garage supervisors make inspections and inventories of other snow-removal equipment and tools. Plows, plow parts, skid chains, pan scrapers,

shovels, sewer cross bars, and numerous other tools are inspected, inventoried and arrangements made for repairs and/or replacement of lost items. In the early fall, when the equipment is made ready for use, a new inventory is made to insure that the authorized allowance of each item is on hand for snow operations. Lifting devices are attached to trucks; plows are then attached to permit testing of the lifting mechanisms. Plows are then placed in racks, ready for prompt attachment when needed.

Salt has become a major weapon in snow fighting. I am sure that all of us are aware of the difficulties in obtaining large quantities of salt on short notice during the winter months. Requisitions for salt are prepared so that bids can be taken and shipments started early. We arrange for storage locations to start receiving shipments during the summer. By the beginning of the snow season, we aim to have stockpiled approximately 60,000 tons of salt.

Keeping in Touch

Since a heavy snowfall places a difficult burden on communications within the department, arrangements are made in the early fall to acquire additional telephones. A direct private wire is installed to the New York office of the U. S. Weather Bureau, to obtain weather forecasts as needed. Since weather forecasts are vital in planning snow removal operations, the department also contracts for a forecasting service, obtained by public bidding. A teletype machine is installed to link us with the successful bidder.

We have a regular procedure to teach new employes the proper operation, care and maintenance of snow removal equipment and for refresher courses for older employes. Prior to the snow season, borough training depots are established for the teaching of men who will become instructors for each district in a borough. Each district superintendent sends to these classes a group of men who are best qualified to become local district instructors. After a sufficient number of district teachers have been trained in the borough training depot, each district superintendent establishes classes in his district for all of the other personnel who are to operate the snow equipment.

For our large staff, plus the large number and variety of temporary help who may be hired, to function properly under emergency snow conditions, it is necessary that training be given for such special duties as: squad leaders of temporary snow laborers, snow clerks, contract snow clerks, loading and dump foremen for hired and contract equipment. These temporary occupations are necessary to insure that accurate records be kept for payroll and other essential purposes and that the emergency snow work be done expeditiously and according to plan.

At our sanitation training center, regular classes are conducted for training our permanent personnel in all phases of these temporary administrative and supervisory positions. Quotas of personnel to be trained in each course are established by the chief of staff and director of training to insure that field operations are not hindered while the classes are in session. These classes are usually spread over a three-month period, beginning in the late summer.

Personnel from other city departments and from civil service eligible lists who may be called upon for temporary snow removal assignments are also instructed in their emergency duties at the sanitation training center.

Temporary laborers and auto truck drivers, hired for snow emergencies, are instructed at their local working locations.

During November, a major rescheduling of refuse collection occurs. Approximately one-third of the refuse collection force is assigned to work nights in order to provide an immediately available force to combat any sudden storm. When there is no snow, this night force performs regular refuse collection assignments.

Set Up Plow Forces

The division of the collection force into day and night plow organizations requires careful planning of plowing organization requirements and refuse collection schedules by the district and borough superintendents. It receives the close and continuous supervision of the chief of staff. The names of the specific personnel assigned to the day and night plow organizations are recorded, the personnel are notified and all preparations for this division of the force are completed by November. In addition, a group of supervisors and men are selected, in advance, during the fall, for assignment to night snow removal operations should a snowfall develop into a large storm. When this occurs, the night plow organization is reinforced by these additional personnel. As can be appreciated, the day and night snow-removal organizations form the backbone of our snow operations.

We have found it necessary to establish separate snow organizations for bridges and express highways, since they are vital links and carry a high volume of traffic. Special directives are issued each November out-

Sanitation employes must keep department vehicles moving on snow-clogged streets. Here they master technique of attaching snow chains.

lining the organization and designating the specific employes assigned. High level supervisors are assigned to these arteries because of their importance.

Our department of sanitation is manned and equipped to handle most snowstorms with its own resources. However, a heavy snowfall requires that help outside the department be sought. Initially, we depend upon the men and equipment available in other city agencies. When this is not sufficient, the department must turn to private industry to lend equipment and operators to supplement its own. In addition, stand-by arrangements are made with large earth-moving contractors for snow removal on a per-cubic-yard basis. Emergency drivers and manual laborers may also be necessary and a stand-by pool of such labor is also established.

In New York City there are five counties, each of which is also a "borough." In charge of each borough is an elected borough president who has charge of street pavement maintenance and sewers. By virtue of these public works activities, the borough presidents have available trucks and other equipment, as well as equipment operators and laborers. Our first call for outside assistance is directed to these borough presidents' offices. We develop with them schedules of equipment and manpower that would be available on short notice for snow emergencies well in advance of the winter. Prior to the winter we also receive permission from them to use specific sewers for the disposal of snow.

As mentioned previously, the department of marine and aviation works with us in the spring to designate certain piers as snow dumps for the next winter.

The department of parks makes available to us salt storage areas from which we jointly draw salt. The department of parks has jurisdiction over snow removal on the parkways. Late last fall we arranged to assume snow plowing on parkways, since they do not have the necessary heavy duty equipment. This required the last minute changing of plowing schedules in order to accommodate these heavily traveled roads.

Advance Coordination

Liaison is maintained with other city agencies so that assistance may be forthcoming in the event of a heavy snowfall. Stand-by arrangements are made with the department of water supply, gas and electricity to use water for increasing sewer flow to promote the sewering of snow and street flushing. The police department is also contacted by us for assistance in removing abandoned cars and parked vehicles and to control traffic during snow operations.

To supplement city-owned equipment and to keep the city's capital investment in such equipment at a minimum, we also hire privately owned earth moving equipment. Borough and district quotas are established for each type of equipment. Contracts are prepared, processed by the department and city law offices, advertised, and entered into with various equipment owners for the employment, when required, on an hourly-rate basis, of trucks, bulldozers, cranes, tow trucks and fork-lift trucks. The equipment owners are registered and all necessary papers are prepared to facilitate quick employment should an emergency occur. During the fall, every effort is made to register sufficient equipment to reach the quota established for each district and borough.

Emergency personnel are employed to operate our collection and snow removal equipment, load refuse collection trucks and perform manual snow removal work, thereby releasing our regular employes for assignment to special snow duties. District quotas are established each fall for emergency chauffeurs and emergency laborers. We advertise by placards, and by calling the New York State Employment Service for equipment operators and laborers to register for snow employment. During the fall, qualified laborers are registered by our foremen and instructed in the proper reporting procedure. Similarly, equipment operators are registered and tested by garage

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Before the snow flies, new employes are briefed on the intricacies of operating a snow blower.

Experienced men bone up on operation of snow plow and flusher truck at refresher session.

A mortar board from college doesn't necessarily mean that a well-educated person is a well-educated driver. Mrs. Thomas Westfall of the Greater Lansing Safety Council demonstrates the point for the sake of women who participated in the Ingham County, Mich., Women Driver Check-Up Rallies.

On Your Toes, Man . . .

The Lady's Been to School

"Wait until I get home and tell my husband he's been doing that wrong all these years!" That was the reaction of one of the women who attended a Women Driver Check-Up Rally held some time ago in Ingham County, Mich.

The rally was one of four sponsored by the Ingham County Women's Extension Program and the Women's Division of the Greater Lansing Safety Council. Each four-hour session consisted of testing, demonstrations and discussion. The programs were conducted by members of Michigan State University's Highway Traffic Safety Center. The rallies were held in Mason, on the county fairgrounds and in the 4-H Club building.

The testing involved written quiz materials, psycho-physical devices and driving exercises. Special demonstrations included a braking test, which utilized detonators as the signal to apply the brakes; a simplified technique for parallel parking, and how to change a tire. Short defensive-driving films, covering a variety of traffic conditions, were shown and followed up with question and answer sessions. The women were given a chance to present their specific driving problems.

Four identical sessions were held so that all women in the area could profit by having four chances to attend and to repeat a session if they felt it necessary.

At the beginning of each session, the women were given the Michigan Citizen's Highway Traffic Safety Committee questionnaire, which usually reveals that the respondent knows less about driving than she thinks she does. This was followed by a written examination designed to point out to the individual that she too has misconceptions, improper attitudes or mistaken ideas which can contribute to traffic accidents.

A startler for the women was a demonstration of what happens to the person riding without a seat belt when the car traveling at only three m.p.h. hits an immovable object.

Another demonstration was that of reaction time in stopping. The women found that driving at 30 m.p.h. they traveled 33 feet after a signal before they could apply the brakes and then another 26 feet braking, or a total of 56 feet before a complete stop.

Other tests given included depth perception, glare acuity and peripheral vision. These proved to be so interesting that reporters and TV cameramen, as well as press photographers, found themselves participating.

The women learned how to make a proper left turn, how to recover after going off the road, and they learned about safe passing and how to watch for caution clues. The ladies were given three simple check points for smooth parallel parking. They also learned that creature comforts to the driver—proper clothing, seat and mirror adjustment, and position of the hands on the wheel—affect driving ability.

Only two of the women filling out the questionnaire had good records. One of them was a safety council employe, the other a club safety chairman. Almost half of the women answered more than half of the questions incorrectly.

Speaking of the rallies, Mrs. Leota Westfall, publicity chairman, said, "This is an opportunity for women drivers to gain additional knowledge and skills in driving as well as to evaluate their abilities and weaknesses as drivers."

Each of the rallies was attended by approximately 35 women who were enthusiastic about the opportunity to learn better driving habits, as well as to participate in the tests offered. As one put it, "It's like a post-graduate course in driver education."

The rallies were given extensive coverage in the Lansing *State Journal* and the *Ingham County News*. Local radio and TV devoted portions or full 15-minute programs to the project. Printed announcements were sent to 618 members of the Greater Lansing Council's Women's Division, and 1200 copies were sent to the county extension agent's office at Mason, Mich., which distributed them to members of some 100 Extension Clubs in the county.

Announce Carol Lane Award Winners

WOMEN in Texas, Ohio, and Delaware have been named winners of the 1961 Carol Lane Awards for Traffic Safety.

First place for safety activities in rural areas and towns of less than 25,000 went to the Business and Professional Women's Club of Wellington, Tex. Winner of first place for cities over 25,000 was Mrs. David Ruetenik, second vice president of the Lakewood, Ohio, Safety Council. For a statewide traffic safety program, the Delaware Federation of Business and Professional Women's Clubs won first place.

The Wellington group spearheaded the formation of the Collingsworth County Safety Council. They worked with that organization in a series of highly successful projects. Among these were crackdowns on minors and others driving without valid licenses, the installation of caution lights and safety islands, and a program of driver education in the Wellington High School.

Mrs. Ruetenik of Lakewood received the award for her efforts in promoting pedestrian safety. She was instrumental in the creation of Safety Town—a complex of miniature streets, sidewalks, buildings, traffic lights and signs constructed on the playground of the Lakewood Garfield Public School—designed to help kindergarten pupils become safe pedestrians, and eventually safe drivers.

The Delaware Federation supported and worked for the passage of legislation for additional state patrolmen and for driver retraining. All 475 driving members of the group's 21 clubs were given the opportunity of advanced training through the "Smith System of Driving"—which improves driving through proper visual habits.

The first-place winners each received a $1,000 U. S. Savings Bond and a bronze sculpture symbolizing woman's protective instinct.

Second-place winners were Mrs. Helen Coughenour of Spencer, Iowa, for her work in organizing the Spencer Council for Safety; the Family Division of the Twin Cities Area Safety Council, St. Joseph, Mich., for its program of training kindergarten children in traffic safety, and the Arizona Federation of Women's Clubs, Phoenix, for its organization of citizen safety groups throughout the state, which carry out special safety campaigns to solve particular traffic problems.

Winners of third place awards were Mrs. Stephen J. Schmidt, president of the Paramus, N. J., Safety Council, for initiating and organizing a school bus safety campaign; Mrs. J. S. Rashba, Pittsburgh, Pa., for work in developing a television series for young drivers over station WQED, Pittsburgh's educational television station, and the South Dakota Congress of Parents and Teachers, Aberdeen, for support of driver education and legislation and school safety.

PARLIAMENT PLUGS SEAT BELTS

Parliament cigarettes are combining selling with seat belt promotion in their current television commercial.

Parliament features a quarter-inch recessed filter which its makers claim provides "that extra margin." The new commercial illustrates that theme.

It shows a couple fastening their seat belts before driving away in their car.

Parliament points out that seat belts provide "that extra margin" of safety and this is concurred in by the National Safety Council, the American Medical Association, and the U. S. Public Health Service who estimate that at least 5,000 lives would be saved each year and one-third of the disabling injuries eliminated if every motorist wore a seat belt.

Sports Stars Speak For Safety

by Richard Tossell

Kyle Rote is carrying safety ball during football season.

Who knows more about the value of steady nerves under pressure than top-flight athletes? Nobody, reasoned the New York State Citizens Council on Traffic Safety, so sports stars are carrying the council's message of safety throughout the state via TV and radio.

The council's campaign, stressing driver self-control, was launched in April with Yankee pitcher Bob Turley featured in the public service advertising materials prepared by the council's volunteer agency, Benton & Bowles, Inc.

"Wholehearted and effective cooperation" on the part of broadcasters in all parts of New York, including top stations in Manhattan, is reported by Joseph Kusaila, the council's executive director.

In fact, response was so uniformly favorable that the council decided to distribute another series of spot messages to TV and radio outlets—this one featuring pro golfer Claude Harmon.

Then, as soon as the football season rolled into gear, New York Giant star Kyle Rote carried the ball for the council. "A basketball player will move into the safety spotlight near the end of the year, probably just before Christmas," Kusaila observed.

It is still too early to tell if the campaign is generating driver enthusiasm for self-control at the wheel. At mid-year, New York's statewide traffic death toll stood at 888, compared to 883 for the same period a year ago. However, the June toll of 151 deaths was lowest for the months since 1948.

New York wound up 1960 with 2,088 traffic fatalities, 250,000 injured, and a total bill for highway smashups of some $600 million. As Gov. Nelson A. Rockefeller, the council's honorary chairman, said: "This is a challenge for all of us—in government, in business, in labor, in every phase of community activity."

Governor Rockefeller reactivated the Citizens Council a year ago, and enlisted Clifton W. Phalen, president of the New York Telephone Co., to serve as president. Phalen, in turn, rounded up a group of the state's leading safety authorities to help plan and direct the council's work.

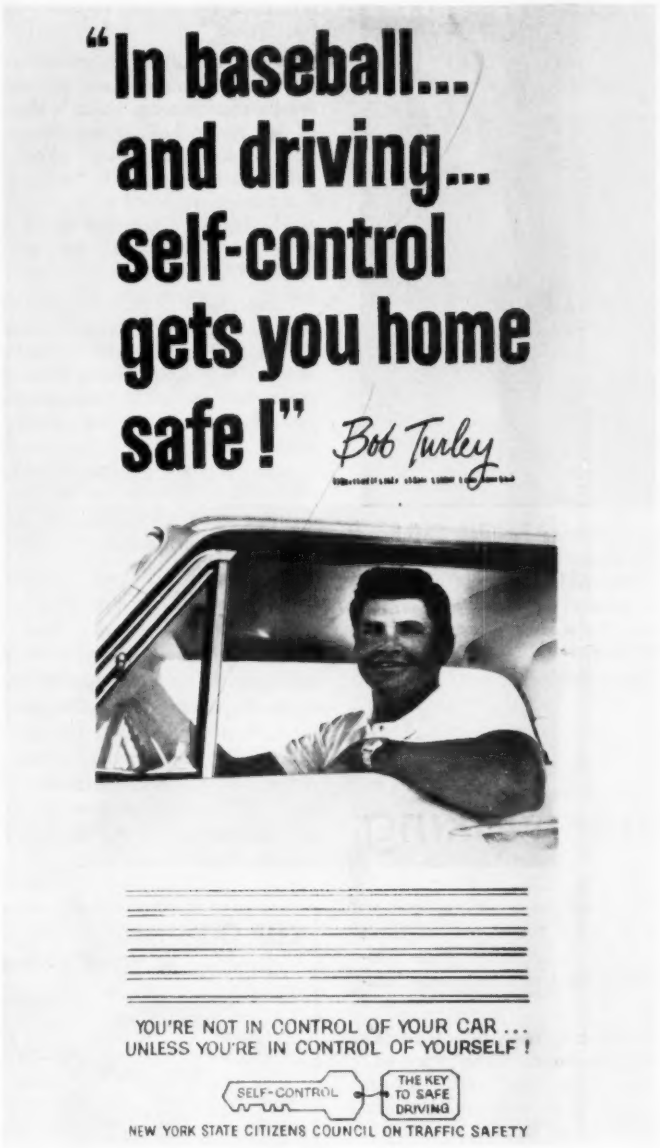
Dr. Walter A. Cutter, director of New York University's Center for Safety Education, is the council's first vice president. Attorney Donald Kramer is second vice president. Albert T. DeRoose, executive director of the Affiliated Trucking Association, is treasurer and Harry G. Helm, advertising manager of the Glens Falls Insurance Co., is secretary.

Phalen said the council's emphasis on driver self-control developed from studies showing that "if you control yourself, you will control your car." Emotional strain and excessive drinking are typical situations in which self-control is diminished or lost, he said, "and if you happen to be driving at the time, you are asking for trouble."

Driver education, Phalen added, is a key element in the council's six-point citizen action program. Other elements include:

- Cooperation with businesses and industries in traffic safety programs for employes.
- Support for sound government policies aimed at improving highway safety conditions.
- Cooperation with community civic groups promoting traffic safety.
- Aid in the formation of effective local traffic safety groups where they do not exist, and wider cooperation with existing groups.
- Support for driver education programs in public and private schools.

Richard Tossell is assistant director, New York State Citizens Council on Traffic Safety.


"In baseball... and driving... self-control gets you home safe!"
Bob Turley
YOU'RE NOT IN CONTROL OF YOUR CAR ...
UNLESS YOU'RE IN CONTROL OF YOURSELF !
SELF-CONTROL
THE KEY TO SAFE DRIVING
NEW YORK STATE CITIZENS COUNCIL ON TRAFFIC SAFETY

Publicity such as this was based on the premise that admiration leads to emulation. It was believed that the message would create a "favorable image" of safety in the minds of baseball fans—one that would translate into improved highway habits.

Leslie J. Sorenson Resigns Post

Leslie J. Sorenson, Chicago deputy commissioner of streets and sanitation, resigned on Sept. 1, bringing to a close a career of 47 years with the city.

Sorenson served under eight Chicago mayors, starting as superintendent of the traffic and sign division.

He developed the nation's first standard school sign for slowing traffic—which was later adopted throughout the world. Under his direction, the first one was erected in Chicago in 1915. That same year he conducted the city's first traffic survey. The survey was made to convince a number of Chicago bankers that the city needed another bridge across the river.

Throughout his career, Sorenson has been active in traffic safety work and closely associated with the National Safety Council. In 1938 he became a member of the NSC board of directors, a position he still holds. He was vice president for Traffic and Transportation from 1943 to 1949.

He has been vice president for Public Safety; vice chairman of Street and Highway, Traffic Section, and chairman of the Committee on Pedestrian Control and Protection. He has also served on the Council's Executive Committee.

Sorenson, who is known as dean of the nation's traffic engineers, will continue to keep a hand in traffic safety as traffic and public safety consultant to Mayor Richard J. Daley.

Mumford Re-elected

Don E. Mumford, safety consultant and a trustee of Kiwanis International, has been re-elected to a second two-year term on the Kiwanis International Board.

Mumford, a member of the New York State Citizens Safety Council and chairman of its community service committee, is a past chairman of the railroad section, National Safety Council. He is also a past chairman, safety section, Association of American Railroads. He is a former director of the National Safety Council.

Posters are an important part of the annual Christmas Holiday Safety Campaign promotional materials. Looking over one of this year's selections are NSC staff members, left to right, Alice Mills, director of the Women's Department, Marvin Nicol, assistant general manager of Civic Leaders Services, and Gil Grieve, director of the Labor Department.

A Safe Christmas Is in the Making

Christmas, big business world-'round, means a big task to the National Safety Council's National Committee of Religious Leaders for Safety.

For the third consecutive year, the committee has organized an intensive campaign to reduce the tragic number of fatalities that makes Christmas for so many families black instead of white.

What is the committee's objective? To get top religious leaders on the national, state and local levels to spread a message of the driver's moral responsibility for safety. Civic groups, safety councils, business and industrial and labor leaders are asked to join in the effort.

Beginning December 1 and continuing through New Year's Day, the theme of the campaign, "Keep Christmas in Your Driving," will be carried out by these religious and lay leaders. They will make those around them aware of the incongruity of an irresponsible driver and a religious holiday.

Kits containing campaign materials are being mailed to those who will be working for the safety cause. Others wishing to promote the campaign may obtain kits by writing to: Christmas Holiday Safety Campaign, National Safety Council, 425 N. Michigan, Chicago 11, Ill.

Posters and promotional literature are contained in these kits. An outline on how to activate the program is provided, with suggestions for appointing committees to take over various aspects of the campaign. Special materials for the holiday accident prevention campaign are safety warnings and facts on the use of Christmas trees and decorations. Some of the problems involved in winter driving are discussed in the booklet "Ready, Set, Snow."

Much attention is given to the problem of drinking and driving, the deadly combination which is the cause of too many holiday accidents. The "dry up the office party" effort again will be incorporated into the campaign. Companies are asked to leave the cork on the bottled Christmas spirits which were once a traditional part of office celebrations.

Cooperation in the campaign in the past two years has been encouraging to committee members. The safety message was disseminated through appeals on radio-TV announcements, posters, billboards, and church sermons. Editorials and feature stories appeared in newspapers and religious publications. Letters and leaflets were distributed by school children as well as campaign organizers.

The effect of past campaigns? Christmas and New Year fatality tolls, on a mileage death rate basis, have been dropping. The committee is encouraged by these facts, even though it is impossible to determine how many lives were saved by the campaign. But a reminder comes from Arthur B. Langlie, committee chairman: "This year, with more drivers and automobiles on our thoroughfares, our challenge is even greater."

Included in the Christmas kit is a mat of this cartoon for use in participating publications.

DOCTORS FAVOR SEAT BELTS

The Advertising Department of the American Medical Association recently completed a survey questionnaire which disclosed a substantial endorsement of seat belts by members of the medical profession.

The questionnaire was sent to 1,000 physicians selected through AMA's record department, representing a random sample of physicians in private practice in this country. Five hundred thirty-one replies were received. The survey had 11 questions, one of which was devoted to seat belts. The question posed and the replies were as follows:

1. Do you have safety belts installed in your car(s) at present?

32.8 per cent have safety belts installed in their cars at present—59.5 per cent do not—7.7 per cent did not designate.

a. Do you intend to install safety belts in your car(s)?

46.9 per cent intend to install safety belts in their cars—25.8 per cent do not—27.3 per cent did not designate.

b. Do you recommend the installation of safety belts to others?

81.5 per cent recommend the installation of safety belts to others—12.8 per cent do not—5.6 per cent did not designate.

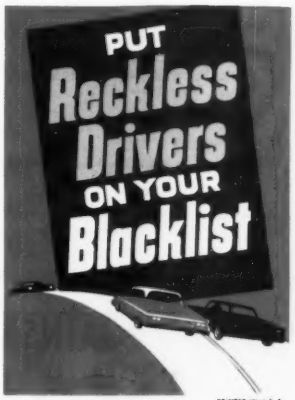
c. Do you favor making safety belt anchorages (front and rear) standard equipment?

88.1 per cent favor making safety belt anchorages (front and rear) standard equipment—7.9 per cent do not—4.0 per cent did not designate.

d. Do you favor extending standard safety equipment to include crash padding, improved steering wheel and recessed post, etc.?

92.5 per cent favor extending safety equipment to include crash padding, improved steering wheel and recessed post, etc. — 3.5 per cent do not—4.0 per cent did not designate.

NEW TRAFFIC POSTERS FOR FEBRUARY POSTING



T-2267-C 25x38
T-2268-A 8½x11½

T-2269-B 17x23

orders for new posters shown cannot be shipped until after December 1

POSTER PRICES*

SIZE	QUANTITIES				
	1	10	100	1000	5000
Suffix "A"		$.13	$.077	$.066	$.055
Suffix "B"		.25	.21	.17	.13
Suffix "C"	$.44	.33	.26	.24	.22

*NSC Members receive 10% discount on above prices. Quantity prices apply on a single shipment to one location. Please enclose check with orders less than $3.00. Prices subject to change without notice.

YOUR CREDIT LINE can be imprinted at time of the press run on Traffic B and C posters only. Orders for imprints on February posters above must be received by December 10, 1961.

Imprinting charges for these posters are $2.25 per lot plus an initial charge for each electroplate of $21.00 for C poster imprint and $12.50 for B poster imprint. Write for prices on quantities of 10,000 or more and for special rates on annual poster orders.

A LOT OF COVERAGE

The outdoor advertising industry, in cooperation with the National Safety Council and The Advertising Council, displayed more than 1,500 posters in a nationwide September campaign to induce drivers to install and use seat belts. Based on Traffic Audit Bureau figures, the September posters generated more than 432 million advertising impressions.

In addition to The Advertising Council campaign, the outdoor advertising industry extended its support an extra month with a new design. This special October campaign was conducted in cooperation with the General Federation of Women's Clubs, which has selected the seat belt crusade as one of its major efforts.

FLEET POSTERS

POSTER PRICES

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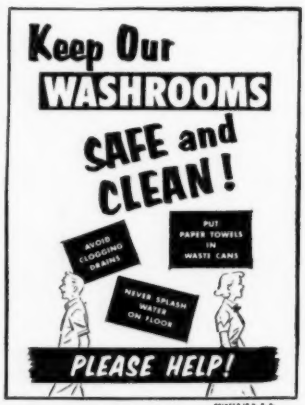
Keep Our WASHROOMS SAFE and CLEAN!
AVOID CLOGGING DRAINS
PUT PAPER TOWELS IN WASTE CANS
NEVER SPLASH WATER ON FLOOR
PLEASE HELP!

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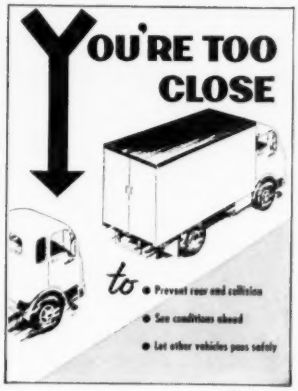

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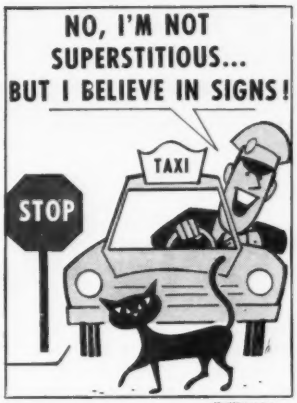
V-2215-A 8½x11½



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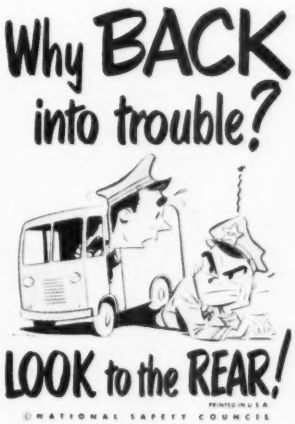
V-8962-B 17x23



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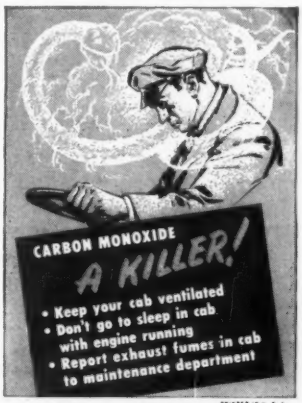
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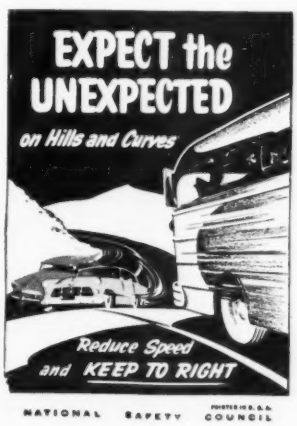
A KILLER!
• Keep your cab ventilated
• Don't go to sleep in cab with engine running
• Report exhaust fumes in cab to maintenance department

V-9464-A 8½x11½

V-1487-B 17x23



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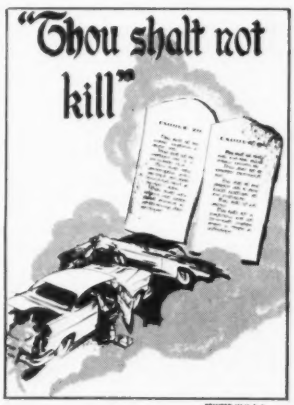

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STONE AGE TACTICS IN THE SPACE AGE

by Alfred C. Finch

FROM the beginning of time, man has been confronted with problems. He has progressed because he has solved these problems and advanced step by step to a better way of life.

In recent years we have advanced faster than at any other time in the history of man. In the span of a lifetime, we have stretched from ol' dobbin and a trip of 30 miles a day to a space vehicle in orbit circling the world in less than two hours.

Although science has advanced spectacularly other areas have not kept pace. Many of our earthly space problems are being met by stone-age solutions, I'm afraid. Often we are content to go on doing things the way we did them yesterday. But Kettering, one of the notables of the automotive industry, once said, "If you're doing a thing today the way you did it yesterday—chances are you're doing it wrong."

Alfred C. Finch is manager of the motor transport department of the National Safety Council.

We are in the process of building 41,000 miles of interstate highways at a cost of $1 million a mile.

In the 16 years estimated to build the interstate system, accidents on our nation's streets and highways will have exceeded the total cost of this million-dollar-a-mile roadway by $55 billion. Or, accidents will have cost us more than twice as much as the system. In 16 years, at our present cost of traffic accidents, we could pay for President Kennedy's $100 billion space program.

How does the trucking industry contribute to this staggering sum of driving errors? *American Trucking Trends* reports an annual cost of accidents to class 1, 2 and 3 carriers alone of $300 million a year amounting to an average of 5 per cent of gross revenues. During the time it takes to build our nation's 41,000 miles of interstate roads, these carriers will have spent $5 billion in accidents. This is the only resemblence to the space age—the astronomical mathematics of human error. We could do a lot to reduce this sum if we used space age methods rather than cave man tactics.

During these 16 years, the National Safety Council will have budgeted $100 million for accident prevention, or less than one tenth of 1 per cent of the nation's traffic accident cost. We will have budgeted $12 million just for transportation programming, less than 2 tenths of 1 per cent of the class 1, 2 and 3 carrier losses—certainly, a weak and feeble cry to eliminate the accident monster.

As a nation we joined forces to fight World War II and beat a common enemy. But accidents—an unrelenting enemy that never surrenders has gone relatively unchecked since before that war and after its victory. We have forsaken the winning formula of working together to keep this enemy from destroying our homes and loved ones.

Duplication of effort, unorganized resistance plus contempt and complacency among the troops that should be waging war on accidents as a

united nation is apparent when you look at the picture of accident prevention.

For example, we grind along with yesterday's outdated selection techniques when we could be using electronic devices that are available to help us do a better job. We ask an applicant to tell us his past record. We ask a former employer for a reference. Both of these fall short because of human failings. Some go one step further to determine whether they're getting a good driver—they use a credit check. They still can't be sure of the internal driving forces behind the applicant's personal temperament. A lie detector, used in criminal detection, is a device that gets correct answers by means of galvanic pressures on the human skin.

About a year ago, Frank Lowrey of the Auto Industries Highway Safety Committee reported the experience of the Detroit Traffic Clinic where out of 10,000 drivers 100 were found to be commitably insane, 850 others feebleminded and still another 1,000 emotionally unstable.

Pat Mullen of the Chrysler Training Center reports that 65 per cent of persons fired from their jobs lost them not because they couldn't do the work but because they had emotional problems that interfered with their getting along with other people.

I could quote expert after expert emphasizing these human problems of employment. But what are we doing about it—are we working the selection angle to its best potential?

If you want correct answers to your selection program, why not use a lie detector? It could save you money in the long run by weeding out many undesirables at the beginning. Almost every commercial fleet that is in trouble accident-wise will reveal weaknesses in the hiring end of the business.

But, it's also important to train the man even though you've made sure he's the right one for you. "Can't afford it," we hear from most quarters. "The boss says we gotta move freight, cars, or what have you." Dead men, men in hospitals and rigs in the repair shop don't haul freight. What's more, while we're paying the bill for accidents we still pay for the substitutes to keep the stock rolling. Here again we're using cave man techniques rather than streamlined methods. Sure, you've got to have testing and training materials and devices. So does your competition and every other fleet operator down the street. But, if everyone who wanted the best-trained driver offered to add his little bit to a pooled testing and training effort, wouldn't we get better drivers?

Assuming you've stepped up your tempo of selection and training to meet the space-age needs, can you stop there? No sir, not by a darn sight. Drivers, being human, have all the shortcomings that you and I have. What's more, they're in an *environment* where their personal behavior is being tested to the breaking point. They're out in traffic with 70 million of the most untrained, unskilled yet most egotistical group ever to ply a trade—the average driver. This average driver won't take the time to practice, read or heed the warnings that are shot his way. So, consequently he goes blindly along having accidents in his average sort of way. The crime is we can't reach him to save him from his first accident which often is his last one.

No Push Buttons

Why, as fleet operators, do we allow our men to work in an atmosphere such as this without the very best of tools? These tools consist of the best maintained vehicle and the best maintained driver. The key, of course, to man-maintenance is proper supervision. How can supervisors maintain good drivers if they haven't first been trained to be good supervisors?

We learn from our space scientists that they operate the space vehicles by remote control. True, the several daring astronauts have taken a turn at the controls but, for the most part, the flight has been planned carefully for weeks and months before flight, and an expert runs the show from an armchair in a control room thousands of miles away.

You'd like to be able to "push button" safety wouldn't you? You'd like to have the scientific solution to this problem of vehicle control so well defined that you could change the course to always insure a safe trip. Strange isn't it we can track a guided missile through thousands of miles of space and yet not know how it is with our driver when he's only a mile away from home.

Electronic devices to guide vehicles are years away, if they will ever be available to us. What's more, if we can't afford the inexpensive tools already at our disposal, how are we going to pay for such expensive equipment? Even such relatively simple devices as color control for traffic lanes by using color-impregnated pavements to indicate safe speed limits and to untangle complicated traffic movement is a long way off.

Are there some stone-age techniques that will still work? Sure, there are! Although man has conquered the elements and is on the threshold of even more startling conquests of space, he hasn't improved his own personal temperament much since the days he called a cave a home.

Love, hate, respect, envy, worry, fear, pride and the like are not new to man. He's always had them. What we have failed to do over the years is to harness these personal forces to our best advantage.

We let our drivers work when they are filled with the undesirable characteristics of worry, fear, disrespect, dissatisfaction and such other conditions. Each of these forces robs the driver of his most precious skill as a driver — his attention. Furthermore, we fail to use the good forces to stimulate his best efforts. For instance, we fail to appeal to his sense of pride, respect, and team spirit. How can any driver be an expert defensive driver if we don't loosen the mental block to his learning?

And, when he does a good job day in and day out, do we take his work for granted? Of course he gets paid, and good pay I might add by many standards. But good drivers and bad drivers generally fare equally as well at pay day. Where then is the stimulation to put forth his best efforts?

Self preservation? This doesn't work—at least not for nearly 40,000 each year who die and another million who end up badly injured.

Financial loss? This again doesn't seem to stop another 10 million who have to pay for their traffic mistakes in property damage. And this doesn't include the millions poured into city and state treasuries each year in the way of traffic fines.

The simple formula is to establish a national code of self respect embodied in a driving performance that

prevents accidents—and doesn't look for excuses. What is good personally for a fleet, an agency, an insurance company, a trade association or any other organization in award programs is not necessarily in the best interests of the driver.

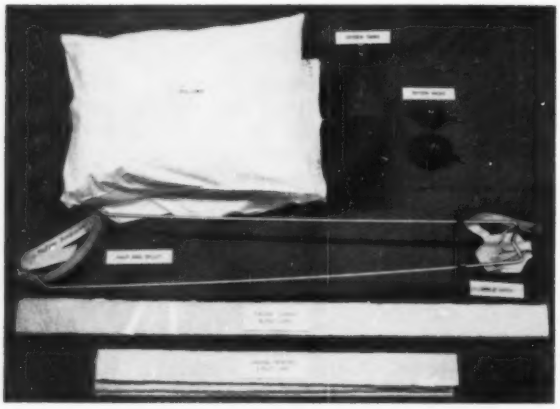
For example, if we had as many different types of currency, representing as many different methods of rewarding professional driving performance as we have safe driver awards, there wouldn't be enough acceptable money to buy a new hat. How long could we exist as a people if every one of us started to print his own money. Those of us who had gold in the bank could claim ours was good. But who'd believe us?

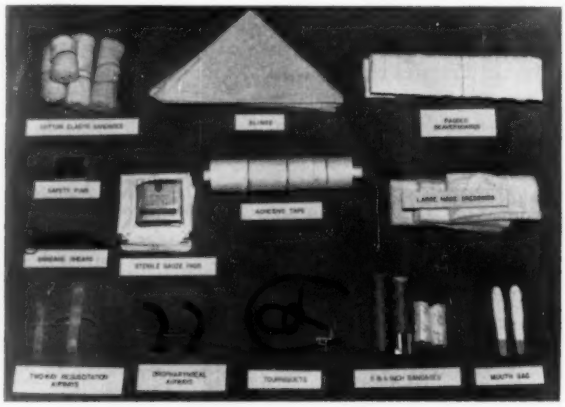
This isn't to say that, similarly, many awards aren't good. In themselves, they are good, no doubt. But side by side, each competing for attention and respect, they simply add up to confusion and nobody wins! Especially the driver.

For many years now, associations have taken an interest in standardization and unformity and have joined forces to collectively promote fleet records competition and recognition. For example, there are 10 trade associations co-sponsoring divisions of the National Fleet Safety Contest.

Such action was the forerunner of the new D-15 American Standard Method of Measuring fleet accident

To Page 46





MINIMAL EQUIPMENT FOR AMBULANCES

Recommended by the Committee on Trauma, American College of Surgeons

The articles listed below, as shown in the accompanying photographs, were approved by the Committee on Trauma at its 1961 meeting in New Orleans as the minimal equipment which would enable trained ambulance drivers and attendants to give adequate care at the site of the accident. The items are:

1) Several pillows; 2) oxygen tanks and masks of assorted sizes for administration of oxygen; 3) hinged half-ring splints—for fractures of the thigh—with web strap for ankle hitch; 4) two or more padded boards 4½ feet in length and 3 inches wide, and two or more similar padded boards 3 feet in length and 3 inches wide, of material comparable to four-ply wood, for coaptation splinting of fracture of leg or thigh; 5) 3 and 6-inch cotton elastic bandages; 6) triangular slings or bandages; 7) two or more padded 15-inch by 3-inch beaver boards, for fractures of the forearm; 8) safety pins, large size; 9) bandage shears; 10) sterile gauze pads; 11) 1-, 2- and 3-inch adhesive tape on cylinder; 12) large made dressings; 13) mouth-to-mouth, two-way resuscitation airways for adults and children; 14) oropharyngeal airways; 15) tourniquets; 16) 3 and 6-inch gauze or muslin bandages; and 17) mouth gags made of three tongue blades taped together and padded.

It is to be emphasized that this list of equipment is minimal; and dependent upon local conditions and local decisions, other items may be added.

The list may be obtained from the Committee on Trauma, American College of Surgeons, 40 E. Erie St., Chicago 11, Ill.

The chairman of the Committee on Trauma during the annual meeting in 1959 directed Dr. Oscar P. Hampton, Jr., St. Louis, chairman, Subcommittee on Transportation of the Injured, to study the equipment problem and formulate a minimal equipment list for ambulances and other casualty carrying vehicles. Dr. Hampton prepared the above list, which reflects the views not only of his associates on the subcommittee but also of many members of the full committee.

—Reprinted from *Bulletin* American College of Surgeons

DATA ON DRINKING DRIVERS

Just what is the real picture of the drinking driver? According to many experts who met during the National Conference on Alcohol and Road Traffic last May, there is no question that more definitive research is necessary to pinpoint the facts about this thorny problem in order to effect some better controls. However, where do we start?

The table on this page indicates one of the prime areas that might be considered. Compiled by Dr. Horace Campbell of Denver, Colo., the data in the table may be studied from two points of view. They are evidence of a serious problem, but they are also evidence of incomplete information.

First, the data are broad enough so that it may be said with fair confidence that 60 per cent of the drivers in the United States killed in car crashes had been drinking; and that 50 per cent of dead drivers have blood alcohol levels in the impairment range —over 0.05 per cent.

This means that the alcohol factor may well be the largest single factor in the traffic fatality picture (with pedestrians excluded), equal indeed to all the other factors combined. And of the pedestrian fatalities, alcohol is involved in more than half the cases.

The evidence is incomplete because traffic fatalities are not all submitted to post mortem examination. In fact, adequate examinations are not done widely enough so that we can be sure that the above picture represents the nation as a whole. Dr. Campbell believes, as many other experts believe, that a thorough investigation and examination is necessary in the case of every motor vehicle accident.

Still more important, he is of the opinion that there must be uniform reporting of the facts. For this reason, he has devised, with the help of Dr. William Haddon of New York, a report form for recording the extent of alcohol involvement in fatal motor vehicle accidents. The form is designed for use internationally in all jurisdictions.

The report form includes information about pedestrians, drivers, and vehicle passengers. It would provide data on the total number of fatalities with death occurring within six hours. It would also indicate how many persons were tested for alcohol content of their blood. Further data would be available through a breakdown of the range of five levels of alcoholic content of the blood from negative to 0.25 per cent and over.

Additional data could be obtained by putting drivers into six categories describing the type of accident involvement. That is, whether there was only one vehicle with the driver killed; more than one vehicle involved, only one driver killed; more than one vehicle, two or more drivers killed; etc.

Campbell is convinced this form can be put into operation very quickly in some states. Eleven states have post mortem examiners who are authorized to make examinations in all violent deaths. He feels these states would provide a good beginning for the report form and may eventually lead to international acceptance.

THE ROLE OF ALCOHOL IN FATAL TRAFFIC "ACCIDENTS"

Region Reported	Data for Years	Driver Fatalities	Per Cent Drinking Drivers	Blood Alcohol 0.15% & over	Blood Alcohol 0.10% & over	Blood Alcohol 0.05-0.14%	Blood Alcohol 0.01-0.04%
Cleveland, Ohio	1937–1955	885	54%	40%	—	12%	2%
Maryland	1950–1959	983	69%	40%	—	22%	6%
Middlesex Co., New Jersey	1948–1959	264	50%	17%	—	33%	—
New York City	1928–1937	215	60%	—	50%	—	—
New York City	1957	69	55%	—	55%	—	—
New York City	1959–1960	34*	59%	—	50%	—	—
Westchester Co., New York	1950–1957	83‡	73%	49%	56%	20%	4%
New York State	1959	92†	87%	51%	75%	33%	3%

*Dying within six hours of the collision.
‡Single-vehicle accidents, with death within four hours.
†One-car fatal accidents, with death within 24 hours.

ASF Research Program

The Automotive Safety Foundation has announced it will expand its highway research program to help states plan future highway construction.

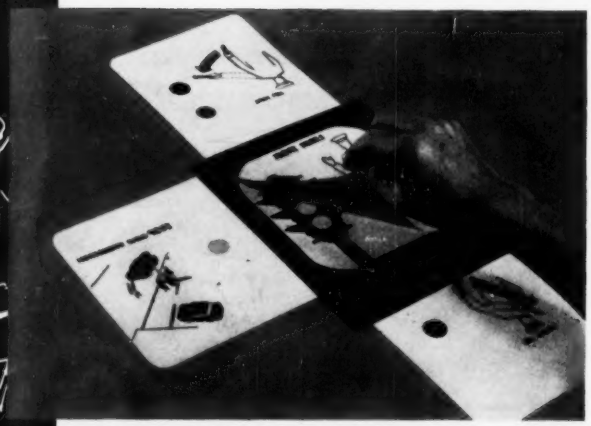
J. O. Mattson, president, said the first project under the new program will be a study for the State of Washington to develop procedures for scheduling highway improvements on a priority basis with construction geared to revenues available under the state's existing tax structure.

The study will be made at the request of the Washington Legislative Joint Fact-Finding Committee on Highways, Streets and Bridges and the State Highway Commission.

The year-long project will include a review of the state's highway administration and its system for classification of roads and streets into areas of state, county and city responsibility.

The foundation has completed similar studies in Kentucky, Tennessee and Rhode Island.

THE DRIVER SAFETY ANSPARENCY SERIES



TRANSPARENCIES, WITH OVERLAYS, MAY BE WRITTEN UPON WITH A CHINA MARKING PENCIL TO INTRODUCE NEW OR SUPPLEMENTARY IDEAS DURING THE DISCUSSION.

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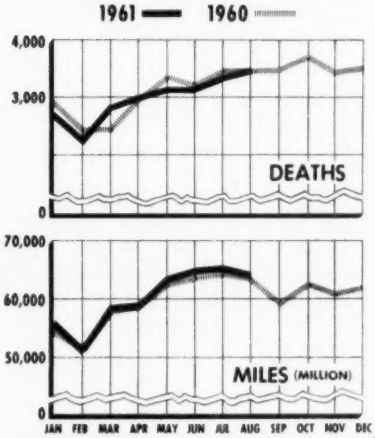
Circle Item No. 13—Reader Service Card

From Page 6

ranked according to the number of deaths per 10,000 registered vehicles were:

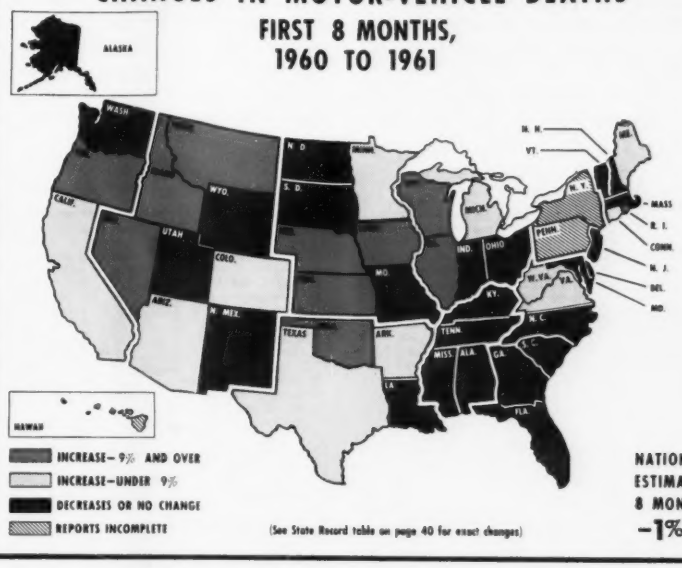
	Reg. Rate	Pop. Rate
Group I (Over 1,000,000 Pop.)		
Los Angeles, Calif.	2.6	13.3
Detroit, Mich.	2.6	9.9
Chicago, Ill.	2.8	7.9
Group II (750,000 to 1,000,000 Pop.)		
Houston, Tex.	2.1	9.6
St. Louis, Mo.	2.3	9.0
Cleveland, Ohio	2.4	7.9
Group III (500,000 to 750,000 Pop.)		
Buffalo, N. Y.	1.6	7.0
Seattle, Wash.	1.6	8.6
Milwaukee, Wis.	1.8	6.5
Group IV (350,000 to 500,000 Pop.)		
Columbus, Ohio	1.5	6.4
Memphis, Tenn.	1.7	6.3
Portland, Ore.	1.8	11.7
Group V (200,000 to 350,000 Pop.)		
Providence, R. I.	1.2	5.8
St. Paul, Minn.	1.3	5.7
Tulsa, Okla.	1.3	6.9
Group VI (100,000 to 200,000 Pop.)		
South Bend, Ind.	0.2	1.1
Allentown, Pa.	0.3	1.4
Evansville, Ind.	0.5	2.1
Group VII (50,000 to 100,000 Pop.)		
Alexandria, Va.	0.0	0.0
Binghamton, N. Y.	0.0	0.0
Kenosha, Wis.	0.0	0.0
Group VIII (25,000 to 50,000 Pop.)		
Anderson, Ind.	0.0	0.0
Boise, Idaho	0.0	0.0
Kokomo, Ind.	0.0	0.0
Group IX (10,000 to 25,000 Pop.)		
Pampa, Tex.	0.0	0.0
Covina, Calif.	0.0	0.0
Lake Worth, Fla.	0.0	0.0

MONTHLY MOTOR VEHICLE DEATHS AND TRAFFIC TRENDS



CHANGES IN MOTOR-VEHICLE DEATHS

FIRST 8 MONTHS, 1960 TO 1961



(See State Record table on page 40 for exact changes)

MOTOR VEHICLE DEATHS AND CHANGES

Months	DEATHS				PERCENTAGE CHANGES				
					Corresponding Months			4 Mos. Mov. Ave.*	
	1956	1959	1960	1961	1956-1961	1959-1960	1960-1961	1959-1960	1960-1961
January	2,954	2,824	2,890	2,660	−10%		− 8%		− 2%
February	2,652	2,401	2,380	2,280	−14%		− 4%		− 5%
March	2,940	2,879	2,400	2,810	− 4%		+17%		− 1%
April	2,970	2,680	2,960	2,990	+ 1%		+ 1%		+ 1%
May	3,094	3,199	3,330	3,130	+ 1%		− 6%		+ 1%
June	3,338	3,138	3,210	3,110	− 7%		− 3%		+ 1%
July	3,555	3,286	3,450	3,310	− 7%		− 4%		− 3%
August	3,535	3,502	3,470	3,470	− 2%		0%		− 3%
8 months	25,038	23,909	24,090	23,760	− 5%		− 1%		
September	3,653	3,381	3,490			+ 3%		+ 2%	
October	3,476	3,386	3,690			+ 9%		+ 4%	
November	3,603	3,527	3,430			− 3%		+ 2%	
December	3,858	3,707	3,500			− 6%		+ 1%	
Total	39,628	37,910	38,200						

All 1956 and 1959 figures are from the National Office of Vital Statistics. The 1960 and 1961 figures are National Safety Council estimates.

The 1961 national estimate is arrived at by assuming that the percentage change from 1960 to 1961 in the states reporting for both years reflects the 1960-1961 change in the entire country. First reports are preliminary, so revisions are made from time to time as later reports are received for the various months. Thus, figures above for 1961 may differ slightly from figures for the same months which will be published in future issues of TRAFFIC SAFETY.

*Four Months Moving Average is based on changes between the totals for four months instead of one month. For example, the August figure shows the change between the totals for May-August 1960 and May-August 1961, etc. Adding several months together tends to smooth out single month changes which may be affected by differences in the number of weekends in a month from one year to the next, random variations, etc.

TRAFFIC DEATHS—CITY RECORDS

The table covers only motor-vehicle deaths resulting from traffic accidents that occurred in the city. Nontraffic motor-vehicle deaths (where the accident occurred on home or work premises) are not included; nor are deaths in the city from accidents occurring outside.

Rankings are based on the 1961 registration death rate which is the number of deaths per 10,000 registered motor vehicles on an annual basis. Vehicle registration figures are for the year 1960 and were supplied by R. L. Polk & Company.

Cities are ranked by registration death rates—from low to high. When two or more cities have exactly the same rate, ranking is by total vehicle registrations—from large to small.

Cities shown in heavy type have improved in 1961 compared with 1960.

The population death rate is the number of deaths per 100,000 population on an annual basis. Populations are as of April, 1960, or later censuses taken by the U. S. Bureau of the Census.

	Eight Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
ALL REPORTING CITIES				2.0	8.2
Group I (1,000,000 and over)					
1. Los Angeles, Calif.	219	243	216	2.6	13.3
2. Detroit, Mich.	110	123	110	2.6	9.9
3. Chicago, Ill.	187	160	189	2.8	7.9
4. Philadelphia, Pa.	98	119	90	2.8	7.3
All cities in this group				2.9	8.2
5. New York, N. Y.	338	374	451	3.5	6.5
Group II (750,000 to 1,000,000)					
1. Houston, Tex.	60	53	76	2.1	9.6
2. St. Louis, Mo.	45	48	51	2.3	9.0
3. Cleveland, Ohio	46	65	58	2.4	7.9
All cities in this group				2.4	8.9
4. Baltimore, Md.	58	77	67	2.7	9.3
Group III (500,000 to 750,000)					
1. Buffalo, N. Y.	25	36	30	1.6	7.0
2. Seattle, Wash.	32	28	32	1.6	8.6
3. Milwaukee, Wis.	32	29	32	1.8	6.5
4. San Antonio, Tex.	30	42	33	2.0	7.7
5. Cincinnati, Ohio	30	41	37	2.0	9.0
6. Pittsburgh, Pa.	28	41	30	2.1	7.0
7. San Francisco, Calif.	42	55	60	2.1	8.5
8. Dallas, Tex.	45	54	43	2.1	9.9
All cities in this group				2.3	8.7
9. Boston, Mass.	32	41	42	2.8	6.9
10. New Orleans, La.	41	44	38	3.3	9.8
11. San Diego, Calif.	60	43	47	4.0	15.7
Group IV (350,000 to 500,000)					
1. Columbus, Ohio	20	25	22	1.5	6.4
2. Memphis, Tenn.	21	36	21	1.7	6.3
3. Portland, Ore.	29	35	29	1.8	11.7
4. Kansas City, Mo.	20	44	33	2.0	6.3
5. Atlanta, Ga.	30	39	56	2.2	9.2
All cities in this group				2.2	9.6
6. Indianapolis, Ind.	35	33	26	2.3	11.0
7. Minneapolis, Minn.	32	36	22	2.3	9.9
8. Fort Worth, Tex.	30	23	23	2.4	12.6
9. Phoenix, Ariz.	31	43	34	2.4	10.6
10. Oakland, Calif.	28	30	37	2.5	11.4
11. Louisville, Ky.	33	33	30	2.8	12.7
Group V (200,000 to 350,000)					
1. Providence, R. I.	8	5	10	1.2	5.8
2. St. Paul, Minn.	12	25	16	1.3	5.7
3. Tulsa, Okla.	12	11	14	1.3	6.9
4. Rochester, N. Y.	13	12	4	1.4	6.1
5. Dayton, Ohio	14	22	14	1.4	8.0
6. Akron, Ohio	13	16	21	1.4	6.7
7. Wichita, Kan.	14	6	7	1.5	8.3
8. Charlotte, N. C.	10	24	14	1.5	7.4
9. Syracuse, N. Y.	9	8	8	1.6	6.3
10. Albuquerque, N. M.	10	13	19	1.7	7.5
11. Richmond, Va.	12	18	15	1.7	8.2
12. Tucson, Ariz.	14	13	10	1.9	9.9
13. Toledo, Ohio	20	19	10	1.9	9.4
14. Grand Rapids, Mich.	14	6	12	1.9	10.4
15. Birmingham, Ala.	21	27	32	2.0	9.2
16. San Jose, Calif.	17	20	16	2.1	12.5
17. Miami, Fla.	26	16	29	2.1	13.4
All cities in this group				2.1	10.1
18. Des Moines, Iowa	15	11	11	2.2	10.8
19. Tampa, Fla.	22	22	20	2.3	12.0
20. Omaha, Neb.	19	9	22	2.3	9.4
21. Norfolk, Va.	17	11	8	2.8	8.3
22. Oklahoma City, Okla.	36	35	16	2.9	16.7
23. Long Beach, Calif.	33	30	18	3.1	14.4
24. Nashville, Tenn.	30	16	11	3.7	17.8
25. Mobile, Ala.	19	22	18	4.0	14.1
26. El Paso, Tex.	29	18	26	4.8	15.7

	Eight Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
Group VI (100,000 to 200,000)					
1. South Bend, Ind.	1	5	3	0.2	1.1
2. Allentown, Pa.	1	10	6	0.3	1.4
3. Evansville, Ind.	2	7	10	0.5	2.1
4. Topeka, Kan.	2	1	8	0.5	2.5
5. Hartford, Conn.	3	6	4	0.6	2.8
6. Tacoma, Wash.	4	10	5	0.7	4.1
7. Madison, Wis.	3	3	3	0.8	3.6
8. Bridgeport, Conn.	3	10	7	0.8	2.9
9. Utica, N. Y.	2	4	4	0.8	3.0
10. Rockford, Ill.	4	8	3	0.9	4.7
11. Lansing, Mich.	4	3	6	1.0	5.3
12. Trenton, N. J.	4	5	5	1.0	5.3
13. Glendale, Calif.	4	6	9	1.0	5.0
14. Berkeley, Calif.	4	3	7	1.1	5.4
15. Arlington, Va.	5	7	7	1.2	4.6
16. Waterbury, Conn.	3	8	2	1.2	4.2
17. Canton, Ohio	5	6	2	1.2	6.6
18. Jackson, Miss.	5	14	8	1.2	5.2
19. Worcester, Mass.	5	9	17	1.3	4.0
20. Santa Ana, Calif.	5	6	7	1.3	7.5
21. Winston-Salem, N. C.	5	3	4	1.3	6.8
22. Lincoln, Neb.	5	4	1	1.4	5.8
23. Baton Rouge, La.	7	4	13	1.4	6.9
24. Flint, Mich.	11	17	9	1.5	8.4
25. Niagara Falls, N. Y.	4	4	3	1.6	5.9
26. New Haven, Conn.	6	9	5	1.6	5.9
27. Fort Wayne, Ind.	9	14	10	1.6	8.3
28. Spokane, Wash.	11	11	8	1.7	9.1
29. Torrance, Calif.	6	3	8	1.7	8.9
30. Amarillo, Tex.	7	8	6	1.7	7.6
31. St. Petersburg, Fla.	13	26	20	1.7	10.8
32. Salt Lake City, Utah	14	17	8	1.8	11.1
33. Austin, Tex.	9	6	12	1.8	7.2
34. Erie, Pa.	8	6	4	1.8	8.7
35. Fresno, Calif.	11	9	10	1.8	12.3
36. Peoria, Ill.	7	10	2	1.8	10.2
All cities in this group				1.8	8.3
37. Anaheim, Calif.	7	11	15	1.9	10.1
38. Springfield, Mass.	8	6	5	2.0	6.9
39. Knoxville, Tenn.	7	7	5	2.0	9.4
40. Elizabeth, N. J.	5	4	4	2.0	7.0
41. Savannah, Ga.	8	7	7	2.1	8.0
42. Shreveport, La.	11	16	9	2.1	10.0
43. Little Rock, Ark.	8	7	7	2.1	11.1
44. Yonkers, N. Y.	8	3	1	2.1	6.3
45. Cambridge, Mass.	4	2	2	2.1	5.6
46. Corpus Christi, Tex.	11	9	4	2.4	9.8
47. Chattanooga, Tenn.	10	11	16	2.4	11.5
48. Greensboro, N. C.	9	6	6	2.5	11.3
49. Kansas City, Kan.	12	13	10	2.5	14.8
50. Dearborn, Mich.	11	8	7	2.6	14.7
51. Beaumont, Tex.	9	5	14	2.7	11.3
52. Youngstown, Ohio	15	8	11	2.7	13.5
53. Hammond, Ind.	7	6	11	2.8	9.4
54. Pasadena, Calif.	13	6	9	2.8	16.8
55. Gary, Ind.	14	7	12	3.0	11.8
56. Columbus, Ga.	10	2	7	3.0	12.8
57. Sacramento, Calif.	27	15	16	3.2	21.1
58. Lubbock, Tex.	13	12	13	3.3	15.2
59. Portsmouth, Va.	8	1	4	3.5	10.5
60. Wichita Falls, Tex.	10	7	5	3.7	14.7
61. Duluth, Minn.	12	8	7	3.8	16.8
Group VII (50,000 to 100,000)					
1. Alexandria, Va.	0	2	5	0.0	0.0
2. Binghamton, N. Y.	0	2	1	0.0	0.0
3. Kenosha, Wis.	0	2	7	0.0	0.0
4. St. Clair Shrs., Mich.	0	2	3	0.0	0.0
5. Evanston, Ill.	0	2	0	0.0	0.0
6. Pawtucket, R. I.	0	2	3	0.0	0.0
7. Johnstown, Pa.	0	2	4	0.0	0.0
8. New Britain, Conn.	0	5	3	0.0	0.0
9. Santa Clara, Calif.	0	6	3	0.0	0.0
10. Oak Park, Ill.	0	2	0	0.0	0.0
11. West Covina, Calif.	0	1	0	0.0	0.0
12. Bayonne, N. J.	0	5	1	0.0	0.0
13. University City, Mo.	0	0	1	0.0	0.0
14. West Hartford, Conn.	0	1	3	0.0	0.0

	Eight Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
15. Meriden, Conn.	0	1	3	0.0	0.0
16. Abilene, Tex.	1	3	5	0.4	1.7
17. Warren, Mich.	1	6	8	0.4	1.7
18. Augusta, Ga.	1	4	4	0.4	2.1
19. Ann Arbor, Mich.	1	5	1	0.5	2.2
20. Manchester, N. H.	1	6	5	0.5	1.7
21. Hampton, Va.	1	3	5	0.6	1.7
22. Lynn, Mass.	1	3	7	0.6	1.6
23. Hayward, Calif.	2	3	5	0.6	4.1
24. Raleigh, N. C.	2	8	3	0.6	3.2
25. Wauwatosa, Wis.	1	4	1	0.7	2.6
26. Irvington, N. J.	1	2	0	0.7	2.5
27. Cedar Rapids, Iowa	2	1	0	0.7	3.3
28. Decatur, Ill.	2	3	8	0.7	3.8
29. Lwr. Merion Twp., Pa.	1	2	2	0.7	2.5
30. Odessa, Tex.	2	4	3	0.7	3.7
31. Euclid, Ohio	1	2	1	0.7	2.4
32. Pittsfield, Mass.	1	2	2	0.7	2.6
33. Charleston, S. C.	1	6	0	0.7	2.0
34. Royal Oak, Mich.	2	4	10	0.7	3.7
35. Ogden, Utah	2	13	2	0.7	4.3
36. Lincoln Park, Mich.	1	4	2	0.7	2.8
37. Bloomfield, N. J.	1	2	0	0.7	2.9
38. Santa Barbara, Calif.	2	10	4	0.8	5.1
39. Racine, Wis.	2	6	0	0.8	3.4
40. Rome, N. Y.	1	1	1	0.8	2.9
41. W. Palm Beach, Fla.	2	7	3	0.8	5.3
42. Sioux City, Iowa	2	4	13	0.8	3.4
43. Fort Lauderdale, Fla.	3	7	2	0.8	5.4
44. Bethlehem, Pa.	2	1	1	0.9	4.0
45. Billings, Mont.	2	2	2	0.9	5.7
46. Aurora, Ill.	2	3	1	1.0	4.7
47. Independence, Mo.	2	1	5	1.0	4.8
48. Bloomington, Minn.	1	6	0	1.0	3.0
49. Springfield, Ill.	3	5	3	1.0	5.4
50. Lake Charles, La.	2	2	3	1.0	4.7
51. Bay City, Mich.	2	4	3	1.0	5.6
52. East St. Louis, Ill.	3	3	7	1.0	5.5
53. Schenectady, N. Y.	3	0	1	1.0	5.5
54. Kettering, Ohio	1	4	0	1.1	2.8
55. Saginaw, Mich.	4	3	2	1.1	6.1
56. East Orange, N. J.	2	1	1	1.1	3.9
57. Wilmington, Del.	4	3	4	1.1	6.3
58. Springfield, Ohio	3	3	6	1.1	5.4
59. Newton, Mass.	3	3	5	1.2	4.9
60. Muncie, Ind.	3	3	5	1.2	6.6
61. Durham, N. C.	3	6	8	1.2	5.7
62. Covington, Ky.	2	6	2	1.2	5.0
63. Joliet, Ill.	3	1	3	1.2	6.7
64. Santa Monica, Calif.	4	1	5	1.3	7.2
65. Stockton, Calif.	5	9	9	1.3	8.7
66. Warwick, R. I.	2	2	4	1.3	4.4
67. Huntington, W. Va.	3	6	5	1.3	5.4
68. Lynchburg, Va.	2	2	3	1.3	5.5
69. Wilkes-Barre, Pa.	3	4	2	1.4	7.1
70. Sioux Falls, S. D.	3	2	4	1.4	6.9
71. Lancaster, Pa.	3	5	2	1.4	7.4
72. Midland, Tex.	3	2	1	1.5	7.2
73. Columbia, S. C.	5	5	4	1.5	7.7
74. Hamilton, Ohio	4	4	3	1.5	8.5
75. Norwalk, Conn.	2	6	4	1.5	4.4
76. High Point, N. C.	3	6	1	1.6	7.2
77. New Rochelle, N. Y.	3	2	1	1.6	5.9
78. Pueblo, Colo.	5	2	10	1.6	8.2
79. Lakewood, Calif.	3	2	5	1.6	6.7
80. White Plains, N. Y.	3	0	2	1.6	8.9
81. San Leandro, Calif.	4	2	1	1.6	9.1
82. Kalamazoo, Mich.	5	6	2	1.6	9.1
All cities in this group				1.6	7.2
83. Arlington, Mass.	2	2	1	1.7	6.0
84. Waterloo, Iowa	4	4	2	1.7	8.4
85. Passaic, N. J.	2	0	2	1.7	5.6
86. Palo Alto, Calif.	4	1	4	1.7	11.5
87. San Bernardino, Calif.	7	9	13	1.7	11.4
88. Burbank, Calif.	6	7	7	1.8	10.0
89. San Mateo, Calif.	4	0	1	1.8	8.6
90. Lakewood, Ohio	3	2	3	1.8	6.8
91. Lexington, Ky.	4	0	5	1.8	11.9
92. Colorado Spgs., Colo.	6	0	1	1.9	12.8
93. St. Joseph, Mo.	4	4	2	1.9	7.5
94. Tyler, Tex.	4	1	3	1.9	11.7

	Eight Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
95. Pontiac, Mich.	6	6	3	2.0	10.9
96. Asheville, N. C.	4	4	2	2.0	10.0
97. Las Vegas, Nev.	**6**	**13**	**4**	**2.0**	**14.0**
98. Roanoke, Va.	6	3	3	2.0	9.3
99. Compton, Calif.	**6**	**7**	**7**	**2.0**	**12.5**
100. Mount Vernon, N. Y.	4	1	3	2.0	7.9
101. Reno, Nev.	5	3	2	2.0	14.6
102. Davenport, Iowa	5	4	5	2.0	8.4
103. Wheeling, W. Va.	3	2	1	2.1	8.4
104. Macon, Ga.	**5**	**10**	**5**	**2.1**	**10.7**
105. Dubuque, Iowa	3	3	0	2.1	8.0
106. Portland, Maine	4	2	1	2.1	8.3
107. Great Falls, Mont.	4	2	2	2.1	10.8
108. Lawton, Okla.	**3**	**5**	**4**	**2.1**	**7.3**
109. Medford, Mass.	3	0	1	2.2	6.9
110. Waukegan, Ill.	4	4	1	2.3	10.8
111. West Allis, Wis.	3	1	1	2.3	6.6
112. Waltham, Mass.	3	3	2	2.4	8.1
113. Pensacola, Fla.	6	4	4	2.5	15.8
114. Brockton, Mass.	**4**	**6**	**7**	**2.5**	**8.2**
115. Roseville, Mich.	3	2	5	2.5	9.0
116. Springfield, Mo.	8	8	3	2.6	12.5
117. Eugene, Ore.	6	1	3	2.6	17.6
118. Chicopee, Mass.	3	0	4	2.6	7.3
119. Greenville, S. C.	**6**	**8**	**2**	**2.6**	**13.6**
120. Parma, Ohio	4	3	0	2.8	7.2
121. Reading, Pa.	9	5	4	2.9	13.7
122. Terre Haute, Ind.	7	4	0	2.9	14.5
123. Rock Island, Ill.	4	2	4	2.9	11.6
124. Atlantic City, N. J.	**3**	**4**	**4**	**2.9**	**7.6**
125. Lorain, Ohio	6	3	1	3.0	13.1
126. Jackson, Mich.	6	3	4	3.2	17.8
127. Riverside, Calif.	11	8	7	3.4	19.6
128. Miami Beach, Fla.	7	6	6	3.4	16.6
129. Brookline, Mass.	4	4	2	3.5	11.1
130. Charleston, W. Va.	7	4	9	3.5	12.2
131. Vallejo, Calif.	7	2	6	3.6	17.2
132. Alameda, Calif.	5	3	3	3.6	12.2
133. Fort Smith, Ark.	6	2	7	3.7	17.0
134. Council Bluffs, Iowa	6	2	3	3.7	16.5
135. Greenwich, Conn.	4	4	4	3.8	11.2
136. Stamford, Conn.	9	5	2	4.0	14.6
137. Port Arthur, Tex.	8	6	8	4.1	18.0
138. Tuscaloosa, Ala.	6	3	6	4.1	14.2
139. East Chicago, Ind.	5	4	1	4.3	13.0
140. Livonia, Mich.	8	6	1	4.6	18.0
141. Pomona, Calif.	11	7	4	4.9	24.6
142. Richmond, Calif.	11	3	5	5.1	22.9

Group VIII (25,000 to 50,000)

1. Anderson, Ind.	**0**	**2**	**1**	**0.0**	**0.0**
2. Boise, Idaho	**0**	**3**	**0**	**0.0**	**0.0**
3. Kokomo, Ind.	**0**	**2**	**5**	**0.0**	**0.0**
4. Lafayette, Ind.	**0**	**2**	**1**	**0.0**	**0.0**
5. Whittier, Calif.	0	0	1	0.0	0.0
6. Appleton, Wis.	0	0	3	0.0	0.0
7. Englewood, Colo.	**0**	**1**	**0**	**0.0**	**0.0**
8. Bellflower, Calif.	**0**	**2**	**4**	**0.0**	**0.0**
9. Salina, Kan.	0	0	2	0.0	0.0
10. Poughkeepsie, N. Y.	**0**	**1**	**1**	**0.0**	**0.0**
11. Richmond, Ind.	**0**	**2**	**1**	**0.0**	**0.0**
12. Cuyahoga Falls, Ohio	**0**	**3**	**0**	**0.0**	**0.0**
13. Gastonia, N. C.	**0**	**1**	**3**	**0.0**	**0.0**
14. Gainesville, Fla.	**0**	**1**	**1**	**0.0**	**0.0**
15. Garden City, Mich.	0	0	0	0.0	0.0
16. Marion, Ohio	0	0	2	0.0	0.0
17. East Detroit, Mich.	**0**	**3**	**1**	**0.0**	**0.0**
18. Bloomington, Ind.	**0**	**1**	**3**	**0.0**	**0.0**
19. Boulder, Colo.	0	0	0	0.0	0.0
20. Menlo Park, Calif.	0	0	0	0.0	0.0
21. Massillon, Ohio	**0**	**2**	**0**	**0.0**	**0.0**
22. Sandusky, Ohio	0	0	2	0.0	0.0
23. Santa Cruz, Calif.	**0**	**2**	**1**	**0.0**	**0.0**
24. East Cleveland, Ohio	**0**	**3**	**1**	**0.0**	**0.0**
25. Janesville, Wis.	**0**	**3**	**2**	**0.0**	**0.0**
26. Wausau, Wis.	0	0	2	0.0	0.0
27. South Euclid, Ohio	**0**	**1**	**2**	**0.0**	**0.0**
28. Monrovia, Calif.	0	0	3	0.0	0.0
29. Westfield, N. J.	**0**	**1**	**0**	**0.0**	**0.0**
30. Easton, Pa.	**0**	**1**	**1**	**0.0**	**0.0**
31. Jackson, Tenn.	**0**	**1**	**0**	**0.0**	**0.0**
32. Baldwin Park, Calif.	**0**	**1**	**2**	**0.0**	**0.0**
33. Findlay, Ohio	0	0	3	0.0	0.0
34. Oak Park, Mich.	0	0	0	0.0	0.0
35. Burlington, Iowa	**0**	**2**	**0**	**0.0**	**0.0**
36. Edina, Minn.	0	0	0	0.0	0.0
37. Fond du Lac, Wis.	0	0	1	0.0	0.0
38. Richfield, Minn.	**0**	**1**	**1**	**0.0**	**0.0**
39. Steubenville, Ohio	0	0	2	0.0	0.0
40. West Haven, Conn.	**0**	**4**	**1**	**0.0**	**0.0**
41. Allen Park, Mich.	**0**	**1**	**2**	**0.0**	**0.0**
42. Manitowoc, Wis.	**0**	**2**	**0**	**0.0**	**0.0**
43. Birmingham, Mich.	0	0	0	0.0	0.0
44. Iowa City, Iowa	**0**	**3**	**1**	**0.0**	**0.0**
45. Port Chester, N. Y.	**0**	**1**	**0**	**0.0**	**0.0**
46. Hackensack, N. J.	**0**	**1**	**2**	**0.0**	**0.0**
47. Sherman, Tex.	0	0	1	0.0	0.0
48. Brownsville, Tex.	**0**	**1**	**1**	**0.0**	**0.0**
49. Concord, N. H.	**0**	**3**	**2**	**0.0**	**0.0**
50. Amsterdam, N. Y.	**0**	**2**	**1**	**0.0**	**0.0**
51. Webster Groves, Mo.	0	0	0	0.0	0.0

	Eight Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
52. Shaker Heights, Ohio	**0**	**2**	**0**	**0.0**	**0.0**
53. Madison Hts., Mich.	**0**	**1**	**2**	**0.0**	**0.0**
54. Mt. Clemens, Mich.	0	0	0	0.0	0.0
55. Carlsbad, N. M.	**0**	**1**	**1**	**0.0**	**0.0**
56. Wilmette, Ill.	0	0	0	0.0	0.0
57. Fairmont, W. Va.	**0**	**1**	**0**	**0.0**	**0.0**
58. Revere, Mass.	**0**	**4**	**2**	**0.0**	**0.0**
59. Urbana, Ill.	**0**	**1**	**0**	**0.0**	**0.0**
60. East Lansing, Mich.	0	0	2	0.0	0.0
61. Highland Park, Ill.	**0**	**3**	**2**	**0.0**	**0.0**
62. Cranford, N. J.	**0**	**1**	**1**	**0.0**	**0.0**
63. Park Forest, Ill.	0	0	0	0.0	0.0
64. Enfield, Conn.	0	0	0	0.0	0.0
65. Belmont, Mass.	0	0	1	0.0	0.0
66. Needham, Mass.	**0**	**1**	**1**	**0.0**	**0.0**
67. Redwood City, Calif.	1	1	1	0.5	3.2
68. Yakima, Wash.	**1**	**2**	**1**	**0.5**	**3.5**
69. Everett, Wash.	1	1	4	0.6	3.7
70. Plainfield, N. J.	1	0	0	0.7	3.3
71. Oxnard, Calif.	**1**	**4**	**3**	**0.7**	**3.7**
72. Elmira, N. Y.	1	0	1	0.7	3.2
73. Vancouver, Wash.	1	1	0	0.7	4.6
74. Champaign, Ill.	**1**	**3**	**1**	**0.8**	**3.0**
75. Joplin, Mo.	1	1	0	0.8	3.8
76. Fargo, N. D.	1	1	0	0.8	3.2
77. Bellingham, Wash.	**1**	**2**	**0**	**0.8**	**4.3**
78. Muskogee, Okla.	**1**	**4**	**4**	**0.8**	**3.9**
79. Portsmouth, Ohio	1	0	0	0.8	4.5
80. Hagerstown, Md.	**1**	**3**	**2**	**0.8**	**4.1**
81. Greeley, Colo.	1	0	1	0.8	5.7
82. Alton, Ill.	1	1	4	0.9	3.5
83. Coral Gables, Fla.	**1**	**2**	**2**	**0.9**	**4.3**
84. Beloit, Wis.	**1**	**2**	**0**	**0.9**	**4.6**
85. Mishawaka, Ind.	**1**	**7**	**1**	**0.9**	**4.5**
86. Teaneck, N. J.	1	1	1	0.9	3.6
87. Danbury, Conn.	1	1	0	0.9	3.8
88. Galesburg, Ill.	1	0	4	0.9	4.0
89. West Orange, N. J.	1	1	3	0.9	3.8
90. Woonsocket, R. I.	1	1	2	0.9	3.2
91. Rome, Ga.	1	1	1	0.9	4.7
92. Waukesha, Wis.	1	1	3	0.9	5.0
93. Columbia, Mo.	1	0	2	1.0	4.1
94. National City, Calif.	**1**	**4**	**2**	**1.0**	**4.6**
95. Minot, N. D.	1	0	2	1.0	4.9
96. Kingston, N. Y.	1	1	1	1.0	5.1
97. Kankakee, Ill.	**1**	**2**	**2**	**1.0**	**5.4**
98. Grand Island, Neb.	1	1	1	1.0	5.8
99. Mason City, Iowa	1	1	1	1.0	4.9
100. Austin, Minn.	1	1	0	1.0	5.4
101. Midland, Mich.	1	1	0	1.0	5.4
102. Goldsboro, N. C.	**1**	**5**	**3**	**1.0**	**5.2**
103. Fitchburg, Mass.	**1**	**2**	**3**	**1.0**	**3.5**
104. Milford, Conn.	**1**	**5**	**0**	**1.0**	**3.6**
105. Hamtramck, Mich.	**1**	**2**	**0**	**1.0**	**4.4**
106. Santa Fe, N. M.	**1**	**4**	**0**	**1.1**	**4.3**
107. Tallahassee, Fla.	**2**	**4**	**0**	**1.1**	**6.2**
108. Mansfield, Ohio	2	1	1	1.1	6.3
109. Ames, Iowa	1	0	0	1.1	5.6
110. Kingsport, Tenn.	**1**	**2**	**0**	**1.2**	**5.7**
111. Battle Creek, Mich.	**2**	**4**	**2**	**1.2**	**6.8**
112. Freeport, Ill.	**1**	**2**	**1**	**1.2**	**5.6**
113. Rahway, N. J.	**1**	**2**	**1**	**1.2**	**5.4**
114. Aurora, Colo.	**2**	**3**	**0**	**1.3**	**6.2**
115. El Cerrito, Calif.	1	0	0	1.3	5.9
116. Denton, Tex.	1	0	3	1.3	5.6
117. Middletown, Conn.	1	0	2	1.3	4.5
118. New London, Conn.	**1**	**3**	**2**	**1.3**	**4.4**
119. Wallingford, Conn.	1	0	3	1.3	5.0
120. Elyria, Ohio	2	2	0	1.4	6.8
121. Middletown, Ohio	**2**	**5**	**3**	**1.4**	**7.1**
122. Rochester, Minn.	2	1	0	1.4	7.4
123. La Crosse, Wis.	**2**	**3**	**2**	**1.4**	**6.3**
124. Newport, R. I.	**1**	**2**	**2**	**1.4**	**3.2**
125. Enid, Okla.	**2**	**3**	**2**	**1.4**	**7.7**
126. Hazel Park, Mich.	**1**	**2**	**0**	**1.4**	**5.9**
All cities in this group				1.4	6.8
127. Beverly Hills, Calif.	2	1	4	1.5	9.7
128. Zanesville, Ohio	2	1	2	1.5	7.7
129. Pocatello, Idaho	2	2	3	1.5	10.5
130. La Mesa, Calif.	2	2	1	1.5	9.9
131. Oshkosh, Wis.	2	2	1	1.5	6.7
132. St. Louis Pk., Minn.	2	2	1	1.5	6.9
133. Highland Park, Mich.	2	0	5	1.5	7.9
134. Ventura, Calif.	**2**	**3**	**3**	**1.5**	**10.3**
135. Danville, Va.	2	2	1	1.5	6.4
136. Wyoming, Mich.	**2**	**3**	**5**	**1.6**	**6.6**
147. Leominster, Mass.	**1**	**3**	**1**	**1.6**	**5.4**
138. Elmhurst, Ill.	**2**	**5**	**1**	**1.7**	**8.1**
139. Muskegon, Mich.	3	3	2	1.7	9.7
140. East Hartford, Conn.	2	2	3	1.7	6.8
141. Casper, Wyo.	3	1	1	1.7	11.6
142. Manchester, Conn.	2	2	0	1.8	7.1
143. Manhattan Bch., Calif.	2	0	0	1.8	8.8
144. Bartlesville, Okla.	2	0	0	1.8	10.8
145. Modesto, Calif.	3	2	0	1.8	12.3
146. Lackawanna, N. Y.	1	0	0	1.8	5.1
147. Ft. Pierce, Fla.	2	0	7	1.9	11.9
148. Chula Vista, Calif.	**3**	**4**	**1**	**1.9**	**10.7**
149. Bangor, Maine	2	1	2	2.0	7.7
150. Rapid City, S. D.	3	2	4	2.0	10.6
151. Cheyenne, Wyo.	4	1	2	2.0	13.8

	Eight Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
152. Owensboro, Ky.	3	3	1	2.0	10.6
153. Newark, Ohio	3	1	0	2.0	10.8
154. Lawrence, Kan.	2	1	0	2.0	9.1
155. Park Ridge, Ill.	2	0	0	2.0	9.2
156. Hollywood, Fla.	3	2	4	2.0	12.8
157. Fair Lawn, N. J.	2	0	0	2.0	8.2
158. Daytona Beach, Fla.	**3**	**4**	**4**	**2.1**	**12.0**
159. Lockport, N. Y.	2	0	0	2.1	11.4
160. Provo, Utah	2	0	1	2.1	8.3
161. Quincy, Ill.	3	1	4	2.1	10.1
162. Redlands, Calif.	2	0	1	2.1	11.2
163. Norman, Okla.	2	0	2	2.2	9.0
164. Torrington, Conn.	2	1	1	2.2	10.0
165. Sheboygan, Wis.	3	3	0	2.3	9.8
166. Des Plaines, Ill.	3	2	0	2.3	12.9
167. Watertown, Mass.	2	1	0	2.3	7.7
168. Montclair, N. J.	2	1	1	2.4	7.0
169. Chicago Heights, Ill.	**3**	**6**	**0**	**2.4**	**13.1**
170. Grand Forks, N. D.	2	1	0	2.4	8.7
171. Eau Claire, Wis.	3	0	2	2.4	11.8
172. Mesa, Ariz.	3	3	3	2.5	13.3
173. Granite City, Ill.	3	0	2	2.5	11.2
174. Ontario, Calif.	5	1	1	2.5	17.0
175. Elkhart, Ind.	4	3	0	2.5	14.9
176. Superior, Wis.	**2**	**5**	**2**	**2.5**	**8.9**
177. Spartanburg, S. C.	4	3	5	2.6	13.5
178. Linden, N. J.	3	2	1	2.6	11.3
179. Maple Heights, Ohio	2	0	0	2.6	9.5
180. Stratford, Conn.	3	0	2	2.6	10.0
181. Newburgh, N. Y.	3	1	0	2.6	14.5
182. Burlington, N. C.	3	1	0	2.7	13.6
183. North Miami, Fla.	2	1	1	2.7	10.5
184. Bloomington, Ill.	3	2	0	2.8	12.4
185. Anderson, S. C.	4	2	1	2.8	14.5
186. Rock Hill, S. C.	3	0	3	2.9	15.3
187. Norwich, Conn.	**3**	**4**	**1**	**3.0**	**11.7**
188. Bristol, Conn.	3	2	0	3.0	9.9
189. St. Cloud, Minn.	3	2	2	3.1	13.3
190. Kearny, N. J.	3	1	2	3.1	12.0
191. Bismarck, N. D.	3	1	2	3.3	16.2
192. Barberton, Ohio	4	1	0	3.5	17.8
193. Hamden, Conn.	3	1	3	3.7	10.9
194. Lewiston, Maine	3	1	1	3.7	11.0
195. Big Spring, Tex.	4	1	3	3.8	19.2
196. Southgate, Mich.	**3**	**4**	**0**	**3.8**	**15.3**
197. Inkster, Mich.	4	1	0	3.9	15.3
198. Petersburg, Va.	4	3	0	4.3	16.3
199. Fremont, Calif.	5	3	4	4.3	17.1
200. Ferndale, Mich.	5	0	1	4.3	24.0
201. Michigan City, Ind.	5	4	0	4.3	20.4
202. Elgin, Ill.	7	6	2	4.3	21.3
203. Wyandotte, Mich.	5	3	0	4.3	17.2
204. Temple, Tex.	4	4	4	4.3	19.7
205. Vineland, N. J.	5	5	3	4.5	19.9
206. Orange, Calif.	6	0	1	5.5	34.1
207. Attleboro, Mass.	3	1	4	5.6	16.6
208. Moline, Ill.	8	3	4	5.8	28.1
209. Fairfield, Conn.	6	2	7	5.9	19.5
210. Oceanside, Calif.	6	1	2	8.2	36.0
211. Groton, Conn.	5	1	1	8.7	25.1
212. Calumet City, Ill.	6	0	5	9.3	36.0
213. Southfield, Mich.	9	7	2	10.1	42.9

Group IX (10,000 to 25,000)

1. Pampa, Tex.	**0**	**1**	**0**	**0.0**	**0.0**
2. Covina, Calif.	0	0	0	0.0	0.0
3. Lake Worth, Fla.	0	0	1	0.0	0.0
4. La Porte, Ind.	**0**	**2**	**1**	**0.0**	**0.0**
5. Manhattan, Kan.	**0**	**1**	**0**	**0.0**	**0.0**
6. Renton, Wash.	**0**	**1**	**1**	**0.0**	**0.0**
7. Ypsilanti, Mich.	0	0	0	0.0	0.0
8. Pittsburg, Calif.	0	0	0	0.0	0.0
9. Annapolis, Md.	0	0	1	0.0	0.0
10. Lombard, Ill.	0	0	0	0.0	0.0
11. Tiffin, Ohio	0	0	0	0.0	0.0
12. Monterey, Calif.	**0**	**3**	**0**	**0.0**	**0.0**
13. Richland, Wash.	0	0	0	0.0	0.0
14. Columbia Hts., Minn.	**0**	**2**	**0**	**0.0**	**0.0**
15. Lufkin, Tex.	**0**	**1**	**1**	**0.0**	**0.0**
16. Ottawa, Ill.	**0**	**1**	**2**	**0.0**	**0.0**
17. Cape Girardeau, Mo.	**0**	**1**	**1**	**0.0**	**0.0**
18. So. Portland, Maine	**0**	**1**	**0**	**0.0**	**0.0**
19. Brownwood, Tex.	**0**	**1**	**3**	**0.0**	**0.0**
20. Fairborn, Ohio	**0**	**1**	**0**	**0.0**	**0.0**
21. Whitefish Bay, Wis.	0	0	0	0.0	0.0
22. Albert Lea, Minn.	0	0	1	0.0	0.0
23. Moorhead, Minn.	0	0	1	0.0	0.0
24. Hibbing, Minn.	0	0	0	0.0	0.0
25. Chico, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
26. East Haven, Conn.	**0**	**2**	**0**	**0.0**	**0.0**
27. Coffeyville, Kan.	**0**	**1**	**0**	**0.0**	**0.0**
28. Ada, Okla.	**0**	**2**	**0**	**0.0**	**0.0**
29. Johnson City, N. Y.	0	0	0	0.0	0.0
30. So. Milwaukee, Wis.	0	0	1	0.0	0.0
31. Floral Park, N. Y.	0	0	0	0.0	0.0
32. Huntington, Ind.	0	0	0	0.0	0.0
33. Wooster, Ohio	0	0	3	0.0	0.0
34. Streator, Ill.	0	0	0	0.0	0.0
35. Villa Park, Ill.	**0**	**1**	**0**	**0.0**	**0.0**
36. Hillside, N. J.	**0**	**2**	**0**	**0.0**	**0.0**
37. Berkley, Mich.	0	2	2	0.0	0.0

	Eight 1961	Months 1960	1959	1961 Reg. Rate	1961 Pop. Rate
38. Caldwell, Idaho	0	1	2	0.0	0.0
39. Kennewick, Wash.	0	0	4	0.0	0.0
40. Woodland, Calif.	0	2	1	0.0	0.0
41. Shorewood, Wis.	0	0	0	0.0	0.0
42. Livermore, Calif.	0	2	0	0.0	0.0
43. El Dorado, Kan.	0	0	1	0.0	0.0
44. Antioch, Calif.	0	1	0	0.0	0.0
45. Greenwood, Miss.	0	1	1	0.0	0.0
46. Niles, Ohio	0	2	4	0.0	0.0
47. Sterling, Ill.	0	1	1	0.0	0.0
48. Pasco, Wash.	0	0	1	0.0	0.0
49. Stevens Point, Wis.	0	1	2	0.0	0.0
50. Meadville, Pa.	0	1	0	0.0	0.0
51. Newton, Kan.	0	1	0	0.0	0.0
52. Snyder, Tex.	0	1	0	0.0	0.0
53. Collingswood, N. J.	0	1	1	0.0	0.0
54. La Grange, Ill.	0	1	0	0.0	0.0
55. McAlester, Okla.	0	0	1	0.0	0.0
56. Brookfield, Ill.	0	0	0	0.0	0.0
57. Mt. Pleasant, Mich.	0	0	0	0.0	0.0
58. De Kalb, Ill.	0	1	1	0.0	0.0
59. Morton Grove, Ill.	0	0	0	0.0	0.0
60. Bristol, Va.	0	2	0	0.0	0.0
61. Lexington, N. C.	0	1	0	0.0	0.0
62. Defiance, Ohio	0	2	0	0.0	0.0
63. Owatonna, Minn.	0	0	0	0.0	0.0
64. Prescott, Ariz.	0	0	0	0.0	0.0
65. Goshen, Ind.	0	2	1	0.0	0.0
66. Lamesa, Tex.	0	0	1	0.0	0.0
67. New Bern, N. C.	0	1	1	0.0	0.0
68. Port Angeles, Wash.	0	1	0	0.0	0.0
69. Boone, Iowa	0	0	1	0.0	0.0
70. Wisconsin Rpds., Wis.	0	0	0	0.0	0.0
71. Brainerd, Minn.	0	0	1	0.0	0.0
72. Logan, Utah	0	2	0	0.0	0.0
73. Garden City, Kan.	0	1	0	0.0	0.0
74. Junction City, Kan.	0	0	1	0.0	0.0
75. Hays, Kan.	0	4	0	0.0	0.0
76. Auburn, Wash.	0	0	0	0.0	0.0
77. Hawthorne, N. J.	0	0	0	0.0	0.0
78. La Grange Park, Ill.	0	0	0	0.0	0.0
79. Tracy, Calif.	0	0	0	0.0	0.0
80. Massena, N. Y.	0	0	1	0.0	0.0
81. Waynesboro, Va.	0	0	0	0.0	0.0
82. North Adams, Mass.	0	1	2	0.0	0.0
83. West Lafayette, Ind.	0	2	3	0.0	0.0
84. State College, Pa.	0	0	0	0.0	0.0
85. Warren, Pa.	0	1	0	0.0	0.0
86. Watertown, Wis.	0	3	1	0.0	0.0
87. Naugatuck, Conn.	0	2	4	0.0	0.0
88. Grosse Pt. Wds., Mich.	0	0	0	0.0	0.0
89. Winfield, Kan.	0	0	0	0.0	0.0
90. Moses Lake, Wash.	0	0	0	0.0	0.0
91. Marshfield, Wis.	0	1	0	0.0	0.0
92. Kenmore, N. Y.	0	0	0	0.0	0.0
93. Winnetka, Ill.	0	0	1	0.0	0.0
94. Gardner, Mass.	0	1	1	0.0	0.0
95. Atchison, Kan.	0	1	1	0.0	0.0
96. Beaver Dam, Wis.	0	0	0	0.0	0.0
97. Hanford, Calif.	0	1	0	0.0	0.0
98. Mitchell, S. D.	0	0	0	0.0	0.0
99. Albion, Mich.	0	0	0	0.0	0.0
100. Bay Village, Ohio	0	0	0	0.0	0.0
101. Los Alamos, N. M.	0	0	2	0.0	0.0
102. Northbrook, Ill.	0	0	0	0.0	0.0
103. Dover, Ohio	0	2	1	0.0	0.0
104. Bellefontaine, Ohio	0	0	0	0.0	0.0
105. Van Wert, Ohio	0	0	0	0.0	0.0
106. Martinsburg, W. Va.	0	0	0	0.0	0.0
107. Mansfield, Conn.	0	0	1	0.0	0.0
108. Fairfield, Calif.	0	0	0	0.0	0.0
109. Cudahy, Wis.	0	0	0	0.0	0.0
110. Red Wing, Minn.	0	1	0	0.0	0.0
111. Pacific Grove, Calif.	0	0	0	0.0	0.0
112. Willowick, Ohio	0	1	1	0.0	0.0
113. Marion, Iowa	0	0	0	0.0	0.0
114. Grosse Pte. Pk., Mich.	0	0	0	0.0	0.0
115. Suffolk, Va.	0	0	0	0.0	0.0
116. Dversburg, Tenn.	0	1	3	0.0	0.0
117. Central Falls, R. I.	0	1	0	0.0	0.0
118. Charles City, Iowa	0	0	0	0.0	0.0
119. Rock Springs, Wyo.	0	1	0	0.0	0.0
120. Bemidji, Minn.	0	1	2	0.0	0.0
121. Hornell, N. Y.	0	0	0	0.0	0.0
122. Vacaville, Calif.	0	0	0	0.0	0.0
123. Monmouth, Ill.	0	0	0	0.0	0.0
124. University Hts., Ohio	0	0	1	0.0	0.0
125. Sulphur, La.	0	0	1	0.0	0.0
126. Fort Thomas, Ky.	0	2	0	0.0	0.0
127. Menominee, Mich.	0	0	0	0.0	0.0
128. Bel'font'ne Nbrs., Mo.	0	0	0	0.0	0.0
129. Stoughton, Mass.	0	1	0	0.0	0.0
130. Covington, Va.	0	0	0	0.0	0.0
131. Ironwood, Mich.	0	0	0	0.0	0.0
132. Winchester, Conn.	0	1	1	0.0	0.0
133. Weslaco, Tex.	0	2	1	0.0	0.0
134. No. College Hill, Ohio	0	0	1	0.0	0.0
135. Hurst, Tex.	0	0	1	0.0	0.0
136. Riverdale, Ill.	0	1	0	0.0	0.0
137. Ridgefield Pk., N. J.	0	1	0	0.0	0.0
138. Derby, Conn.	0	3	0	0.0	0.0
139. Donora, Pa.	0	0	0	0.0	0.0
140. Rolling Meadows, Ill.	0	2	0	0.0	0.0
141. Connersville, Ind.	1	1	1	0.2	8.5
142. Medford, Ore.	1	1	1	0.9	6.1
143. Yuma, Ariz.	1	5	1	1.0	6.3
144. Ponca City, Okla.	1	2	0	1.0	6.1
145. Lodi, Calif.	1	1	0	1.0	6.8
146. Longview, Wash.	1	0	1	1.1	6.4
147. Los Altos, Calif.	1	0	2	1.1	7.6
148. Glendora, Calif.	1	0	3	1.1	7.2
149. Sumter, S. C.	1	2	2	1.2	6.5
150. New Kensington, Pa.	1	0	2	1.3	6.4
151. Corvallis, Ore.	1	0	0	1.3	7.2
152. Klamath Falls, Ore.	1	4	1	1.3	8.9
153. Xenia, Ohio	1	1	1	1.3	7.4
154. Adrian, Mich.	1	2	0	1.3	7.4
155. Plainview, Tex.	1	0	2	1.3	8.0
156. Winona, Minn.	1	0	0	1.3	6.0
157. Borger, Tex.	1	1	3	1.4	7.2
158. North Platte, Neb.	1	0	0	1.4	8.7
159. Escondido, Calif.	1	0	1	1.4	9.1
160. Sedalia, Mo.	1	1	3	1.4	6.3
161. Robbinsdale, Minn.	1	0	0	1.4	9.1
162. Cedar Falls, Iowa	1	3	1	1.4	7.1
163. San Fernando, Calif.	1	0	2	1.4	9.3
164. Denison, Tex.	1	1	2	1.4	6.6
165. Butler, Pa.	1	0	0	1.4	7.1
166. Wayne, Mich.	1	0	2	1.4	7.9
167. Pittsburg, Kan.	1	0	1	1.4	8.0
168. Westport, Conn.	1	0	3	1.5	7.1
169. Muskegon Hts., Mich.	1	0	2	1.5	7.7
170. Corsicana, Tex.	1	2	2	1.5	7.4
171. Emporia, Kan.	1	0	0	1.5	8.2
172. Glenview, Ill.	1	0	0	1.5	8.3
173. Evergreen Park, Ill.	1	0	0	1.5	6.2
All cities in this group				1.5	7.5
174. Elmwood Park, Ill.	1	1	0	1.6	6.3
175. Stillwater, Okla.	1	1	0	1.6	6.3
176. Marietta, Ohio	1	0	1	1.6	8.9
177. Greenville, Tex.	1	1	1	1.6	7.9
178. Morristown, N. J.	1	1	0	1.6	8.5
179. Oswego, N. Y.	1	2	0	1.7	6.8
180. Martinsville, Va.	1	1	5	1.7	8.0
181. Valparaiso, Ind.	1	0	0	1.7	9.9

TRAFFIC DEATHS—STATE RECORDS

Deaths are reported by state traffic authorities.

All figures are preliminary. To insure proper comparisons, 1960 and 1959 figures cover the same reporting period as those for 1961.

Population Rate: U. S. population rate is the estimated annual number of deaths per 100,000 population, assuming that deaths for the rest of the year will follow the normal seasonal pattern. State population rate is the estimated annual number of deaths per 100,000 population, assuming that the monthly average of deaths will remain at the present average for the rest of the year. U. S. population rate is based on July 1, 1961 population estimate; state population rates are based on July 1, 1960 population estimates, U. S. Bureau of the Census, Washington, D. C.

States shown in heavy type have improved in 1961 compared with 1960, or showed no change.

Mileage Rate: The number of deaths per 100 million vehicle miles of travel.

(Figures in parenthesis following the 1961 mileage rate indicate the number of months for which the mileage rate is calculated for each state.)

	Months Reported	Deaths Identical Periods 1961	1960	1959	% Change 1960 to 1961	1959 to 1961	1961 Pop. Rate	1961 Mile. Rate	
TOTAL U.S.	8	23,760	24,090	23,909	— 1%	— 1%	20.7	4.9	(8)
Ala.	**8**	**563**	**563**	**534**	**0%**	**+ 5%**	**25.8**	**6.4**	**(6)**
Alaska	**8**	**18**	**21**	**14**	**— 14%**	**+ 29%**	**11.8**	**—**	**—**
Ariz.	8	335	326	351	+ 3%	— 5%	38.2	7.6	(7)
Ark.	8	275	265	301	+ 4%	— 9%	23.1	5.7	(7)
Calif.	8	2,432	2,346	2,251	+ 4%	+ 8%	23.0	5.1	(4)
Colo.	8	296	279	265	+ 6%	+ 12%	25.3	5.4	(5)
Conn.	8	173	164	151	+ 5%	+ 15%	10.2	2.3	(5)
Del.	**8**	**36**	**55**	**51**	**— 35%**	**— 29%**	**12.0**	**1.9**	**(7)**
D. of C.	7	26	47	35	— 45%	— 26%	5.9	1.3	(5)
Fla.	**8**	**731**	**810**	**711**	**— 10%**	**+ 3%**	**21.9**	**5.3**	**(7)**
Ga.	**8**	**611**	**670**	**653**	**— 9%**	**— 6%**	**23.2**	**5.2**	**(6)**
Hawaii	7	52	60	51	— 13%	+ 2%	13.9	—	—
Idaho	8	158	145	148	+ 9%	+ 7%	35.3	5.7	(6)
Ill.	8	1,138	1,023	1,106	+ 11%	+ 3%	16.9	4.1	(6)
Ind.	**8**	**661**	**690**	**690**	**— 4%**	**— 4%**	**21.2**	**4.6**	**(7)**
Ia.	8	414	354	408	+ 17%	+ 1%	22.5	5.0	(7)
Kan.	8	346	303	388	+ 14%	— 11%	23.8	5.0	(6)
Ky.	**8**	**444**	**465**	**490**	**— 5%**	**— 9%**	**21.9**	**5.9**	**(6)**
La.	**8**	**434**	**531**	**420**	**— 18%**	**+ 3%**	**19.9**	**5.9**	**(7)**
Maine	8	109	102	85	+ 7%	+ 28%	16.8	3.9	(7)
Md.	**8**	**273**	**347**	**331**	**— 21%**	**— 18%**	**13.2**	**3.5**	**(7)**
Mass.	**8**	**337**	**366**	**348**	**— 8%**	**— 3%**	**9.8**	**2.8**	**(7)**
Mich.	8	971	933	854	+ 4%	+ 14%	18.6	4.5	(6)
Minn.	8	458	440	368	+ 4%	+ 24%	20.1	4.3	(7)
Miss.	**8**	**344**	**428**	**343**	**— 20%**	**+ *%**	**23.7**	**6.3**	**(7)**
Mo.	**8**	**594**	**640**	**583**	**— 7%**	**+ 2%**	**20.6**	**4.4**	**(6)**
Mont.	8	177	144	155	+ 23%	+ 14%	39.2	7.8	(6)
Neb.	8	211	171	229	+ 23%	— 8%	22.4	4.5	(7)
Nev.	8	132	106	122	+ 25%	+ 8%	68.8	9.4	(5)
N. H.	**8**	**45**	**59**	**78**	**— 24%**	**— 42%**	**11.2**	**2.8**	**(6)**
N. J.	**8**	**488**	**488**	**470**	**0%**	**+ 4%**	**12.0**	**2.9**	**(7)**
N. M.	**8**	**226**	**259**	**288**	**— 13%**	**— 22%**	**35.4**	**6.2**	**(5)**
N. Y.	7	1,059	1,051	1,147	+ 1%	— 8%	10.8	3.9	(7)
N. C.	**8**	**708**	**722**	**742**	**— 2%**	**— 5%**	**23.3**	**5.6**	**(6)**
N. D.	**8**	**86**	**102**	**119**	**— 16%**	**— 28%**	**20.3**	**5.1**	**(6)**
Ohio	**8**	**1,020**	**1,220**	**1,105**	**— 16%**	**— 8%**	**15.7**	**3.7**	**(6)**
Okla.	8	439	403	419	+ 9%	+ 5%	28.2	5.3	(6)
Ore.	8	294	254	308	+ 16%	— 5%	24.9	5.3	(7)
Pa.	**7**	**774**	**895**	**876**	**— 14%**	**— 12%**	**11.7**	**3.3**	**(6)**
R. I.	8	49	36	55	+ 36%	— 11%	8.6	2.5	(6)
S. C.	**8**	**432**	**449**	**408**	**— 4%**	**+ 6%**	**27.1**	**7.0**	**(6)**
S. D.	**8**	**129**	**135**	**140**	**— 4%**	**— 8%**	**28.4**	**6.1**	**(7)**
Tenn.	**8**	**467**	**506**	**471**	**— 8%**	**— 1%**	**19.6**	**4.9**	**(6)**
Tex.	8	1,452	1,441	1,502	+ 1%	— 3%	22.6	4.7	(6)
Utah	**8**	**138**	**162**	**124**	**— 15%**	**+ 11%**	**23.1**	**4.9**	**(5)**
Vt.	**8**	**48**	**65**	**60**	**— 26%**	**— 20%**	**18.4**	**4.3**	**(7)**
Va.	8	511	479	532	+ 7%	— 4%	19.3	4.8	(7)
Wash.	**8**	**322**	**357**	**343**	**— 10%**	**— 6%**	**16.9**	**3.9**	**(7)**
W. Va.	8	222	207	265	+ 7%	— 16%	17.9	5.2	(6)
Wis.	8	574	516	517	+ 11%	+ 11%	21.7	5.2	(6)
Wyo.	8	102	106	119	— 4%	— 14%	46.1	7.5	(5)
P. R.‡	**8**	**196**	**244**	**168**	**— 20%**	**+ 17%**	**12.5**	**12.1**	**(7)**
V. I.†	**6**	**1**	**4**	**4**	**— 75%**	**— 75%**	**6.3**	**—**	**—**
CANADIAN PROVINCES									
Alta.	7	130	162	122	— 20%	+ 7%	19.2	—	—
B. C.	6	142	114	122	+ 25%	+ 16%	19.1	—	—
Man.	7	56	58	69	— 3%	— 19%	11.2	—	—
Ont.	7	650	566	581	+ 15%	+ 12%	24.2	—	—
Sask.	8	97	70	100	+ 39%	— 3%	16.6	—	—

*Less than .5%

‡Commonwealth of Puerto Rico

†Virgin Islands

	Eight Months 1961	1960	1959	1961 Reg. Pop. Rate	1961 Pop. Rate
182. Ocala, Fla.	**1**	**4**	**0**	**1.7**	**11.0**
183. Redding, Calif.	1	0	0	1.7	11.7
184. Fostoria, Ohio	1	1	0	1.8	9.6
185. Arkansas City, Kan.	1	0	1	1.8	10.5
186. Pendleton, Ore.	1	0	2	1.8	10.4
187. Faribault, Minn.	1	0	1	1.8	8.9
188. Alpena, Mich.	1	0	2	1.8	10.2
189. Rocky River, Ohio	1	1	1	1.8	8.3
190. Gainesville, Tex.	1	1	1	1.9	11.5
191. Norfolk, Neb.	1	1	1	1.9	11.5
192. Wethersfield, Conn.	**1**	**2**	**0**	**1.9**	**7.3**
193. Fergus Falls, Minn.	1	0	0	1.9	10.9
194. Mt. Vernon, Ill.	1	1	0	2.0	9.6
195. Shelton, Conn.	1	1	1	2.0	8.2
196. Mamaroneck, N. Y.	1	0	2	2.0	8.5
197. Vernon, Tex.	1	1	2	2.0	12.4
198. Darien, Conn.	**1**	**9**	**2**	**2.0**	**8.2**
199. Fort Myers, Fla.	2	1	1	2.1	13.3
200. Elizabeth City, N. C.	1	0	1	2.1	10.6
201. Reidsville, N. C.	**1**	**6**	**0**	**2.1**	**10.5**
202. Brawley, Calif.	**1**	**3**	**0**	**2.1**	**11.8**
203. Hopewell, Va.	1	0	1	2.2	8.4
204. Merced, Calif.	2	0	2	2.2	14.9
205. Menasha, Wis.	1	0	0	2.2	10.3
206. St. Joseph, Mich.	1	1	0	2.3	12.7
207. North Olmsted, Ohio	1	0	0	2.3	9.2
208. Monroe, Mich.	**2**	**6**	**0**	**2.3**	**13.0**
209. Bowling Green, Ohio	1	0	1	2.4	11.0
210. Highland Park, Tex.	1	1	0	2.4	14.4
211. Kinston, N. C.	2	1	1	2.4	12.1
212. Beeville, Tex.	1	0	1	2.4	10.9
213. Windsor, Conn.	**1**	**3**	**2**	**2.5**	**7.7**
214. Virginia, Minn.	1	0	0	2.5	10.7
215. Homewood, Ala.	**1**	**2**	**1**	**2.5**	**7.3**
216. Cambridge, Md.	1	1	0	2.5	12.3
217. Warrensville Hts., Ohio	1	1	0	2.5	14.2
218. River Forest, Ill.	1	1	2	2.5	11.8
219. So. St. Paul, Minn.	2	0	0	2.6	13.6
220. Marinette, Wis.	1	1	2	2.6	11.3
221. River Rouge, Mich.	1	1	3	2.6	8.3
222. Cadillac, Mich.	1	0	0	2.7	14.9
223. Great Bend, Kan.	2	0	0	2.7	18.0
224. Jeffersonville, Ind.	2	1	1	2.7	15.4
225. Two Rivers, Wis.	**1**	**2**	**1**	**2.7**	**12.1**
226. Aberdeen, S. D.	2	1	1	2.8	13.0
227. Brentwood, Mo.	1	0	0	2.8	12.2
228. Milford, Mass.	1	1	1	2.8	9.6
229. Maumee, Ohio	1	1	0	2.8	12.4
230. Muscatine, Iowa	2	0	0	2.8	14.3
231. Glastonbury, Conn.	1	0	0	2.9	10.3
232. Traverse City, Mich.	2	0	0	2.9	16.3
233. Pompano Beach, Fla.	**2**	**3**	**0**	**2.9**	**18.8**
234. W. Springfield, Mass.	**2**	**3**	**4**	**3.0**	**12.0**
235. Napa, Calif.	3	3	0	3.0	20.3
236. Tempe, Ariz.	2	0	2	3.1	12.0
237. Walla Walla, Wash.	3	0	0	3.1	18.4
238. Augusta, Maine	2	2	2	3.1	13.8
239. Webster, Mass.	1	0	0	3.2	10.9
240. Uniontown, Pa.	2	1	0	3.3	16.8
241. Bell, Calif.	3	3	1	3.4	23.1
242. Watertown, Conn.	1	0	1	3.5	10.1
243. Peru, Ind.	2	1	3	3.5	20.7
244. East Moline, Ill.	2	1	2	3.6	18.0
245. Stonington, Conn.	1	0	1	3.7	10.7
246. Santa Paula, Calif.	**2**	**3**	**0**	**3.7**	**22.6**
247. Wheaton, Ill.	3	1	0	3.9	18.5
248. Niles, Mich.	2	0	1	3.9	21.7
249. Canton, Ill.	2	0	1	4.0	22.1
250. Killingly, Conn.	1	0	2	4.0	13.3
251. Griffin, Ga.	3	3	0	4.1	20.7
252. Milibrae, Calif.	2	1	0	4.2	18.9
253. Astoria, Ore.	2	0	0	4.2	26.8
254. Coon Rapids, Minn.	2	2	1	4.2	20.1
255. Holland, Mich.	4	2	0	4.3	24.2
256. Colton, Calif.	3	1	0	4.3	24.1
257. Escanaba, Mich.	2	2	0	4.4	19.5
258. Branford, Conn.	2	0	1	4.4	18.1
259. Statesville, N. C.	3	0	0	4.5	22.7
260. Albany, Calif.	2	0	1	4.5	20.3
261. Coronado, Calif.	2	1	3	4.5	16.7
262. Southington, Conn.	2	2	0	4.5	13.2
263. Henderson, N. C.	2	1	0	4.6	23.6
264. Brigham City, Utah	2	0	0	5.4	25.6
265. Monroe, N. C.	2	2	2	5.4	27.5
266. Ecorse, Mich.	2	2	0	5.4	17.3
267. Bellevue, Wash.	3	1	0	5.5	35.2
268. Du Bois, Pa.	2	0	1	5.5	28.0
269. Marquette, Mich.	3	1	0	5.5	22.7
270. Lake Forest, Ill.	2	0	1	5.6	28.0
271. Auburn, Mass.	2	1	0	5.8	21.4
272. North Chicago, Ill.	**2**	**3**	**2**	**5.9**	**14.6**
273. Bellaire, Ohio	2	0	0	6.1	26.1
274. Windham, Conn.	3	2	0	6.2	26.5
275. Vernon, Conn.	3	0	0	6.2	26.5
276. La Salle, Ill.	2	1	0	6.3	25.2
277. Western Springs, Ill.	2	0	0	6.5	27.8
278. Salisbury, N. C.	5	0	1	6.9	35.2
279. Westlake, Ohio	3	1	1	7.9	34.9
280. Farmington, Conn.	**2**	**3**	**2**	**8.7**	**27.8**
281. Ansonia, Conn.	4	1	1	8.9	30.3
282. Brooklyn, Ohio	3	0	2	10.0	42.1
283. New Canaan, Conn.	5	1	0	10.8	55.6
284. Owosso, Mich.	8	1	0	12.6	70.6
285. Beacon, N. Y.	5	1	0	15.4	54.0
CANADIAN CITIES					
Hamilton, Ont.	10	15	13	—	5.7
Toronto, Ont.	69	66	52	—	6.8
London, Ont.	11	5	5	—	10.2

MOTOR VEHICLE DEATHS AND INJURIES BY STATES 1961 and 1960

Forty-three states and the District of Columbia have reported their death and injury experience for one to seven months of 1961.

The table below shows all of the injury data reported by each state, but little information is available on precisely what injuries are included in each state's tabulation.

Differences in the ratio of injuries to deaths probably reflect primarily differences in the extent to which all injuries are reported. Other factors are undoubtedly involved, such as: (1) a few states omit some or all of the injuries in urban accidents; (2) there are large differences between states in the proportion of travel which is in urban area (the injury-death ratio for urban accidents is about four times the ratio for rural accidents).

The question of what injuries are being reported applies with equal force to the per cent change in injuries from 1960 to 1961. Any tightening up of police administration, any emphasis on "get all the injuries," is almost certain to bring about an increase in reported injuries, but probably only in minor ones. Similarly, instructions to "skip the scratches" probably would result in a decrease in recorded cases in many states. Introduction of financial responsibility laws has been observed to increase reported injuries sharply. Even the public's increased claims-consciousness is regarded by many people as an element in the growing number of injuries reported. With such factors operating to destroy comparability, indicated changes in the number of injuries should not be considered as reliable.

Months Reported	Deaths†† 1961	Deaths†† 1960	Injuries†† 1961	Injuries†† 1960	% Change 1960 to 1961 Deaths	% Change 1960 to 1961 Injuries	1961 Ratio of Injuries to Deaths
TOTAL U.S.	** 15,308#	15,822#	674,741	646,231	— 3#	+ 4	44
Ala.	7 486	479	2,595†	2,820†	+ 1	— 8	5
Ariz.	7 291	281	8,430	7,282	+ 4	+ 16	29
Ark.	7 239	219	2,977	2,305	+ 9	+ 29	12
Calif.	6 1,769	1,714	75,798	72,138	+ 3	+ 5	43
Colo.							
Conn.	4 72	64	7,886	6,968	+ 13	+ 13	110
Del.	6 22	35	1,404	1,244	— 37	+ 13	64
D. of C.	7 18	43	4,459	4,510	— 58	— 1	248
Fla.	7 659	714	28,601	27,025	— 8	+ 6	43
Ga.	7 510	572	10,351	11,016	— 11	— 6	20
Idaho	5 76	78	2,173	1,712	— 3	+ 27	29
Ill.	6 819	726	53,031	47,355	+ 13	+ 12	65
Ind.	6 469	484	18,234	17,643	— 3	+ 3	39
Ia.	7 342	301	10,378	10,253	+ 14	+ 1	30
Kan.							
Ky.	7 378	399	9,313	8,514	— 5	+ 9	25
La.	7 380	477	4,477†	4,674†	— 20	— 4	12
Maine	7 91	81	3,701	3,889	+ 12	— 5	41
Md.	6 199	269	11,744	11,511	— 26	+ 2	59
Mass.	5 192	211	43,420	34,271	— 9	+ 27	226
Mich.	7 814	782	48,370	48,307	+ 4	+ *	59
Minn.	7 368	362	18,555	15,653	+ 2	+ 19	50
Miss.	7 294	366	4,764	4,550	— 20	+ 5	16
Mo.	7 519	552	7,182	7,162	— 6	+ *	14
Mont.	5 92	63	1,464	1,446	+ 46	+ 1	16
Neb.	7 176	135	6,559	6,212	+ 30	+ 6	37
Nev.							
N. H.	7 34	50	3,798	3,459	— 32	+ 10	112
N. J.	2 74	124	10,560	9,810	— 40	+ 8	143
N. M.	6 154	188	2,993	2,897	— 18	+ 3	19
N. Y.	4 526	529	77,816	81,121	— 1	— 4	148
N. C.	6 519	540	14,712	12,163	— 39	+ 21	28
N. D.	1 9	5	133	124	+ 80	+ 7	15
Ohio	7 834	1,051	43,338	45,516	— 21	— 5	52
Okla.							
Ore.	6 222	168	8,714	7,834	+ 32	+ 11	39
Pa.	4 380	449	21,700	27,023	— 15	— 20	57
R. I.							
S. C.	7 377	390	8,327	6,881	— 3	+ 21	22
S. D.	6 85	91	1,516	1,582	— 7	— 4	18
Tenn.	7 410	416	12,749	11,529	— 1	+ 11	31
Tex.	7 1,271	1,231	34,819	33,235	+ 3	+ 5	27
Utah.	6 96	109	4,487	4,112	— 12	+ 9	47
Vt.	7 39	49	1,706	1,545	— 20	+ 10	44
Va.	4 221	222	7,929	7,411	— *	+ 7	36
Wash.	6 225	238	15,580	13,617	— 5	+ 14	69
W. Va.	6 156	152	3,560	3,374	+ 3	+ 6	23
Wis.	3 185	154	6,551	6,905	+ 20	— 5	35
Wyo.	6 72	68	1,443	1,341	+ 6	+ 8	20
P. R.‡	6 143	187	6,336	6,185	— 24	+ 2	44
V. I.¶	6 1	4	108	107	— 75	+ 1	108

†Rural injuries only.

††All figures are preliminary. To insure proper comparisons, 1960 figures cover the same reporting period as those for 1961.

*Less than .5%.

**Death and injury totals cover reports for all months indicated in this column.

#Death totals and changes differ from national figures because those shown here are based on the states and months for which injury data are reported.

‡Commonwealth of Puerto Rico.

¶Virgin Islands.

Safety Library

From Page 4

Entries pour in for fourth annual Drivers' Public Service awards. *Taxicab Industry/Auto Rental News.* August, 1961, p18.

Fifth Paul Gray Hoffman award competition announced by ASF. *American Road Builder.* August, 1961, p30.

Hold roadeo without industry aid. *Motor Truck & Coach.* August, 1961, p29. (Ontario, Canada.)

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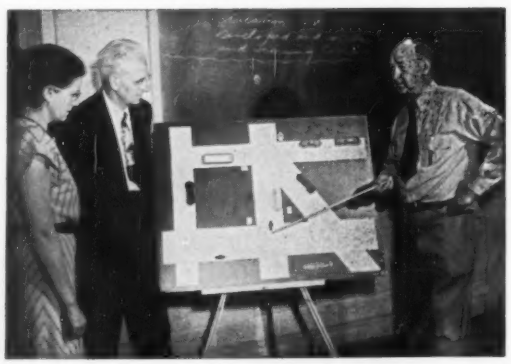

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Stone Age Tactics

From Page 34

experience co-sponsored by the American Trucking Associations and the National Safety Council. I'm sure this is the initial step in putting space age tactics to work.

The *Harvard Business Review* last year took many industries to task for failing to be foresighted in their business affairs. One big fault mentioned was failure to look to better ways of doing the job and beating competition to the punch through product and methodology research.

Ours is not a static economy. Changes occur constantly and "the better mousetrap" pays off. Of course, it helps to have laws and regulations favorable to your type of business. On the other hand, business must be sure it has done its part in producing the best possible product for the majority at the most favorable cost.

Monopolies of any kind interrupt the natural laws of supply and demand on which our economic system is based. They do not long endure when they produce unwholesome inequities. As we know the pendulum swings in two directions.

As an industry, fleet operators have one commodity to offer—service. Service in this case includes in large measure, safety. Safety of product transported is a big factor between competitors within an industry and against rival industries. We have seen many manufacturers create their own transportation systems when damage, loss and delays eat into their profit margins. Recent surveys in the *Wall Street Journal* show this to be happening more and more. Thirty-two per cent of accident costs in trucking are O.S. and D. claims.

I find it very disturbing to hear fleet people say, "Our accident record is bad because we can't get good drivers." This is true whether regular or part time.

Why don't we have more schools to train drivers? In every part of the country there are schools to learn barbering, television servicing, dentistry, husbandry and almost every other job. Where can a young man go to learn how to be a good driver?

Why have we taken this highly demanding type of work for granted and why do we still cling to the "do-it-yourself" type of driver training?

As safety men what are we doing to train young men in our profession? Where can you go to learn how to be a safety engineer? How many colleges train men to be safety engineers? What's more, what does the industry do about promising young men who graduate with college training that equips the man for safety work? I have on my staff two young men who graduated from a school that does provide a valuable background in the related field of traffic. They have worked into the special field of fleet safety remarkably fast. Both men found it extremely difficult to break the ice in industry. Why hasn't the transportation industry invested in our youth and encouraged them to enter fleet safety? Here is where our strength lies. We must be two and three deep in qualified safety people in our organizations.

All too often when a safety director passes away or changes jobs, the program receives a severe set back. Even though a replacement is found, he generally has to spend valuable time learning the ropes with little or no held from within the company.

Transportation from the public point of view is *every* truck—those of the entire industry including the small fleet operator who's safety is strictly marginal. The butcher, baker and candlestick maker often help to establish public opinion which can be, and sometimes is, unfavorable.

How can transportation take the big step into the space age as far as safety is concerned? From where I stand there are a few things that can be done right now and some that can be started now if they are to bear fruit in the important years that lie ahead. These are:

1. Establish one nation-wide standard of expert professional driving performance.

2. Step up the training factor. This means for (1) the driver, (2) the driver supervisor, (3) the safety supervisor and management *throughout* transportation. Certainly the success demonstrated by top operators should encourage like action among *all* fleets.

3. Loosen up the safety dollar. Now I don't mean spend more money at NSC necessarily, I mean let's spend money to train drivers, to keep drivers in top performance, to keep equipment in top performance and to encourage young talent to enter our business.

4. Encourage safety education at the college level and seek out talent that is becoming available each year. At least we should not steer them away from us by indifference.

5. Encourage much needed research as an industry, making funds available to trained technicians in both human and mechanical engineering.

6. Assure that our industry is represented at the planning table for tomorrow's traffic and transportation needs. At this table we must provide capable people with new ideas that work for safety.

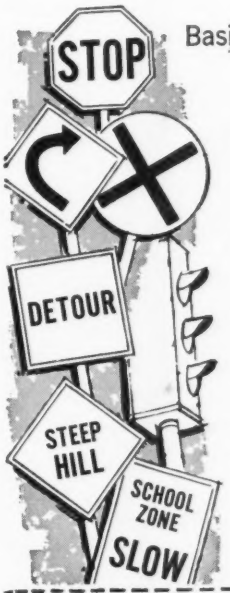
There is no accident panacea. The prevention of accidents cannot be accomplished over night.

New York Storm

From Page 23

foremen. If qualified, they are instructed in the operation of our equipment.

Since a heavy snowfall, particularly when followed by persistent low temperatures, may be too much for us to handle with our own and emergency labor, contracts are awarded in the fall by public letting to the lowest responsible bidder in each of certain designated snow-removal contract areas. Compensation is based upon the bid price per cubic yard of snow and ice removed and disposed. Snow removal contract areas are established on a geographical basis and may consist of one or more sanitation boroughs. The contractor provides open-body dump-trucks for hauling, front end loaders and/or cranes for loading, equipment operators, and sufficient manual laborers to trim snow from the removal areas and also to trim any snow dropped at the disposal points.



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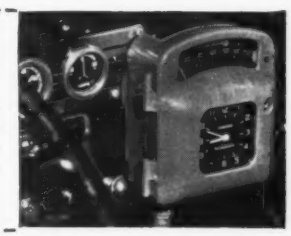

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Eastbay Belts Them In

From Page 11

In addition to the chapter activity, many professionals and volunteers put in hours of effort, working on their own: James D. Knochenhauer, of the U.S. Public Health Service in San Francisco demonstrating his crashing model cars, and Robert McPherson, division manager of Continental Can Co., whose independent program resulted in installations in 100 per cent of his employe's cars, deserve special commendation.

Changes in the general program format are on the way. As of October 1, 1961, all group orders are now being placed through *local sources* of supply. Manufacturers have built jobber networks and are withdrawing from direct factory sales. It is right that they should do so. Future programs promise even bigger results for the coming years. As orders for 100 or more belts begin to reach the order desks of local jobbers and distributors, interest will be generated in the hearts of commission sales forces. A pyramiding effect will begin to take place. More trained personnel will be preaching the seat belt sermon. Sales will increase. Competition for a larger share of the fast-moving market will bring more advertising and promotional dollars into play. *The inevitable result will be more seat belts in more automobiles.*

Most Eastbay retailers are still not awake to the seat belt trend. Recently, a fellow Rotarian approached Clint Dreyer and said, "Say, Clint, I just bought a new automobile. Paid more than $7,000 for it, and asked that seat belts be installed fore and aft. The salesman told me, 'We don't install belts in prestige cars!'—What do you think of that?"

We *told* him what we thought of that. *We also told the dealer.*

In spite of these isolated occurrences, we feel that the trend to seat-belt motoring is definitely underway in the Eastbay. People are finding a new enjoyment—and peace of mind—from motoring with seat belts. At some time in the near future, more retail stores — taking their cues from other consumer outlets—will begin to suggest to their customers that they take a look at the advantages of seat belts. Auto dealers will find the addition of seat belts will increase the sales potential of used cars.

In the meantime, the job will continue to be done by safety directors, and personnel managers, health educators and school people, club women and business executives. And the calls will continue to come in to the seat belt coordinators throughout the area — from employes who drop into the office or telephone from upstairs—with a message that begins: "Just thought you might be interested . . ." and ends with, "Thank God for that seat belt program."

Off-Street Parking

From Page 19

Curb parking hampers street maintenance, street sweeping and snow removal.

Vehicles parked at the curb frequently restrict emergency vehicles and emergency operations.

The problems created by vehicular breakdowns, emergency stops, loading and unloading operations of both passenger and freight, are further complicated by curb parking.

In conclusion, I would like to stress five points.

1. Streets should have been designed in the past, and should be so designed in the future, for vehicular travel, and not for parking.

2. The total costs to a community for storage of vehicles on the street is enormous — taking into consideration the costs of accidents, costs of capacity restrictions and delays, and other costs.

3. Curb parking restricts capacity much more than most people realize.

4. Curb-side parking on our major streets must inevitably be eliminated in the future, in view of estimates of auto registrations and travel.

5. If curb-side parking must ultimately be removed, even on widened or improved facilities, should not our policy of waiting until volumes build to capacity be changed perhaps to recognize or take into consideration the problems which will develop at some future date when parking is removed.

I believe that curb-side parking creates a much larger problem than most of us find it convenient to admit. The solution to the problems created by the removal of this parking is going to require much more cooperation and coordination of effort in the future, than has been given in the past.

NEW... SAFETY EQUIPMENT

Publication of product announcements in this section should not be construed as endorsement or approval by the National Safety Council.

Lane Markers

New, easily stored and carried Traffic Safety Lane Markers are now being made by Stokes Molder Products, Trenton, N. J. These markers consist of inter-changeable yellow tubes set in a separate, heavy 10″ square molded base. Made in heights from 12″ to 72″ in increments of 12″ with excellent visibility, particularly in the tall sizes. Colors are molded in for permanency; cannot wear or flake off—and the units have good impact resistance.

The lane markers occupy little space, are easily carried in car trunks by highway crews, and by police for emergency use at the scene of accidents. The manufacturer claims that twice the number of Stokes markers can be used at less cost than for the usual markers; double the safety factor, greater economy. Units will accommodate presently-used, standard accessory flags, warning signs or flashing lights.

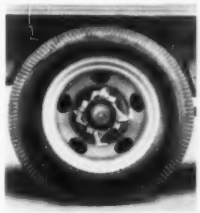
(Item 41)

Tire Saver

In the testing phase and research for the past six years the Tire Saver has proven to be reliable in warning the driver he has a low tire while moving, according to the manufacturer The Catlin Tire Saver Co., Manzanola, Colorado.

Working on the premise that if the driver knows instantly when tire pressure becomes low he can stop and change, thus saving valuable tires from ruin by not running on them after they have gone flat. The tire saver consists of a spring that is compressed behind the firing pin. The trigger being in direct contact with the flap or tube which exerts more pressure than the spring. The trigger holds the firing pin in place as long as the tire pressure remains above forty pounds. When the pressure gets below forty the firing pin strikes a 38 blank, the report of which instantly warns the driver that he has a low tire. Completely mechanical, with no moving parts or electrical connections to get out of order. Simple to attach, it is self contained and needs no service between flats.

(Item 42)



Back-Up Alarm

A new mounting device for the six-inch Bell Back-Up Alarm has been introduced by the E. D. Bullard Company. Known as the Quick Attachment Mounting, the product facilitates installation and removal of the truck alarm.

If it is necessary to change a wheel, the alarm may be taken off by removing one pin. The Quick Attachment remains in place, ready to accommodate the Alarm when it is returned to position.

The six-inch Bell Back-Up Alarm with Quick Attachment Mounting was designed for use on delivery, dump and batch trucks, pick-ups, van and stake trucks. Any truck with an axle flange or dual wheels can have the extra safety feature of Bullard's mechanical Bell Alarm. All parts are replaceable, and the Bullard Back-Up Alarm meets all requirements for mechanical bell-type vehicle alarms.

(Item 43)

Double-Duty Tachograph

Marketed by Argo Instruments Corp., New York 36, N. Y., this recording instrument indicates both engine speed and road speed, and records the data on both sides of a single chart.

At one glance, the chart can reveal dangerous or costly driving practices.

The new Model TCO 14-2 was announced after six months of intensive testing on both common carriers and private fleets.

The TCO 14-2 provides a continuous, closed and tamper-proof record of vehicle operation. It records RPM's, MPH's, stop and go, and the exact distances traveled. It guards against lugging, over-revving, and driving downhill in neutral. An advanced dial design provides easy reading for the driver.

(Item 44)

Plastic, Wide-Angle Delineator

A roadway delineator which combines the advantages of wide-angle reflection and prismatic plastic has been announced by Minnesota Mining and Manufacturing Co. (3M), St. Paul, Minn.

Visible at wide angles in headlights at night, these delineators continue to work as safety devices even when posts are bent out of position by accident or vandalism, according to 3M. In addition, wide-angle characteristics simplify the work of maintenance crews in aligning them along curves and other hazardous areas.

Called "Reflecto-Lite" brand delineators, these 3-inch center-mount reflectors are available in silver, amber or red, with or without an aluminum housing. Both types are completely dustproof and waterproof, the company said. They can be fastened to a post with any non-rusting fastener up to 3/16-inch diameter.

Delineator consists of a prismatic molded plastic face and back which seal in a wide-angle reflective sheet composed of glass elements embedded in synthetic sheet resin.

(Item 45)

The Doctor

From Page 14

official coordinating committee for traffic safety in those states where he is not a member.

What of the Future?

What effect will this report have? It's too early to tell. It took many years of experience, investigation, and experimentation to define the proper roles of the police, the driver licensing authority, accident records units, traffic engineers, etc. These roles and functions are now incorporated in such standards as the Action Program and the Uniform Vehicle Code.

It will likewise take time before it can be determined with any great degree of soundness just what traffic safety functions the medical people should perform, how they should perform them, and, indeed, who should perform which functions—state health officials, state medical societies, private physicians. It is hoped that this special Traffic Inventory questionnaire, which will be repeated next year, will speed the process greatly. As stated by Dr. Shanholtz and General Stewart in the letter of transmittal to the report:

"This report represents a pioneering effort. We urge that it be used to the fullest in furthering cooperation between health officials, organized medicine, and traffic officials in stepping up the attack on one of our nation's major public health problems—traffic accidents."

Dr. Alexander V. Monto, chief, traffic safety branch, U. S. Public Health Service, stated it even more succinctly: "Let's hope the report stirs some action."

COMING EVENTS

Nov. 8-9, Columbia, S. C.

Twenty-fourth Annual South Carolina Accident Prevention Conference. Wade Hampton Hotel. Contact Fred Derrick, South Carolina Industrial Commission, 1015 Main St., Columbia, S. C.

Nov. 13-17, Detroit, Mich.

Eighty-ninth Annual Meeting of the American Public Health Association, Cobo Hall. Contact Joseph G. Molner, M.D., health commissioner, Detroit, Mich.

Dec. 10-12, New Orleans, La.

Louisiana Safety Conference. Roosevelt Hotel. Contact Dudley Andry, 823 Perdido St., New Orleans 12.

Jan. 18-19, Milwaukee, Wis.

Wisconsin Annual Mid-Winter Safety Conference and Exposition. Hotel Schroeder. Contact R. W. Gillette, executive director, Wisconsin Council of Safety, Inc., 119 W. Washington Ave., Madison 3, Wis.

Feb. 2-9, 1962, Oregon State University

Northwest Roads and Streets Conference. Campus of Oregon State University. Contact J. Al. Head, assistant traffic engineer, Oregon Highway Building, Salem, Ore.

Feb. 7, 1962, Dayton, Ohio

Tenth Annual Miami Valley Safety Conference. Biltmore Hotel. Contact Fred H. Lewis, manager, Safety Council, Dayton Area Chamber of Commerce, Biltmore Hotel, Dayton 2.

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New Safety Equipment

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Safety Product Literature

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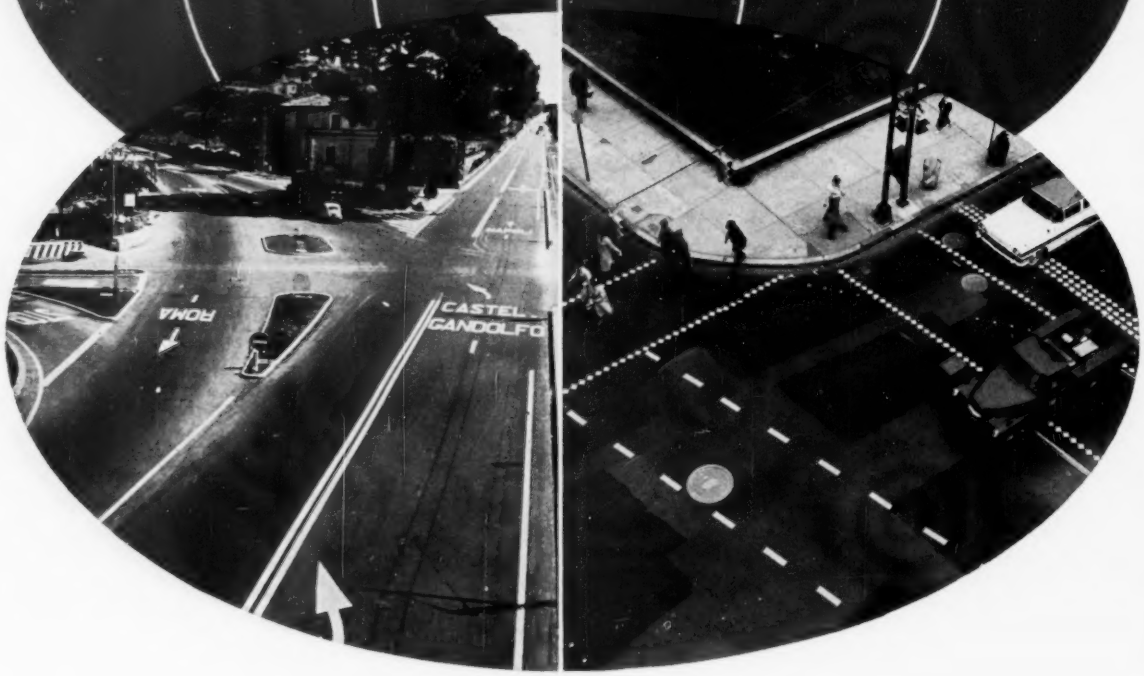

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